



www.phoronix-test-suite.com

WIP Kernel Test Perf

Tests for a future article on Phoronix.

Automated Executive Summary

Linux 5.2 Git + No Mitigations had the most wins, coming in first place for 76% of the tests.

Based on the geometric mean of all complete results, the fastest (Linux 5.2 Git + No Mitigations) was 1.132x the speed of the slowest (Linux 5.2 Git). WIP Kernel was 0.896x the speed of Linux 5.2 Git + No Mitigations and Linux 5.2 Git was 0.986x the speed of WIP Kernel.

The results with the greatest spread from best to worst included:

*ctx_clock (Context Switch Time) at 5.634x
Stress-NG (Test: Context Switching) at 2.06x
Hackbench (Count: 32 - Type: Process) at 1.608x
Stress-NG (Test: Socket Activity) at 1.523x
Hackbench (Count: 2 - Type: Process) at 1.477x
Hackbench (Count: 16 - Type: Process) at 1.455x
Selenium (Benchmark: ARES-6 - Browser: Google Chrome) at 1.433x
Hackbench (Count: 2 - Type: Thread) at 1.418x
Selenium (Benchmark: Octane - Browser: Google Chrome) at 1.368x*

Hackbench (Count: 1 - Type: Process) at 1.358x.

Test Systems:

WIP Kernel

Processor: Intel Core i9-7980XE @ 4.20GHz (18 Cores / 36 Threads), Motherboard: ASUS PRIME X299-A (1704 BIOS), Chipset: Intel Sky Lake-E DMI3 Registers, Memory: 16384MB, Disk: Samsung SSD 970 EVO 500GB, Graphics: NVIDIA NV120 12GB, Audio: Realtek ALC1220, Monitor: ASUS PB278, Network: Intel I219-V

OS: Ubuntu 18.04, Kernel: 5.2.0-rc4-fsgs (x86_64) 20190619, Desktop: GNOME Shell 3.28.4, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.3 Mesa 18.2.8, Compiler: GCC 7.4.0, File-System: ext4, Screen Resolution: 2560x1440

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib --with-tune=generic --without-cuda-driver -v

Disk Notes: NONE / errors=remount-ro,relatime,rw

Processor Notes: Scaling Governor: intel_pstate powersave

Java Notes: OpenJDK Runtime Environment (build 11.0.3+7-Ubuntu-1ubuntu218.04.1)

Python Notes: Python 2.7.15+ + Python 3.6.8

Security Notes: l1tf: Mitigation of PTE Inversion; VMX: conditional cache flushes SMT vulnerable + mds: Mitigation of Clear buffers; SMT vulnerable + meltdown: Mitigation of PTI + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline IBPB: conditional IBRS_FW STIBP: conditional RSB filling

Linux 5.2 Git

Linux 5.2 Git + No Mitigations

Processor: Intel Core i9-7980XE @ 4.20GHz (18 Cores / 36 Threads), Motherboard: ASUS PRIME X299-A (1704 BIOS), Chipset: Intel Sky Lake-E DMI3 Registers, Memory: 16384MB, Disk: Samsung SSD 970 EVO 500GB, Graphics: NVIDIA NV120 12GB, Audio: Realtek ALC1220, Monitor: ASUS PB278, Network: Intel I219-V

OS: Ubuntu 18.04, Kernel: 5.2.0-999-generic (x86_64) 20190619, Desktop: GNOME Shell 3.28.4, Display Server: X Server 1.20.1, Display Driver: modesetting 1.20.1, OpenGL: 4.3 Mesa 18.2.8, Compiler: GCC 7.4.0, File-System: ext4, Screen Resolution: 2560x1440

Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++ --enable-libmpx --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib --with-tune=generic --without-cuda-driver -v

Disk Notes: NONE / errors=remount-ro,relatime,rw

Processor Notes: Scaling Governor: intel_pstate powersave

Java Notes: OpenJDK Runtime Environment (build 11.0.3+7-Ubuntu-1ubuntu218.04.1)

Python Notes: Python 2.7.15+ + Python 3.6.8

Security Notes: l1tf: Mitigation of PTE Inversion; VMX: vulnerable + mds: Vulnerable; SMT vulnerable + meltdown: Vulnerable + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of __user pointer sanitization + spectre_v2: Vulnerable IBPB: disabled STIBP: disabled

	WIP Kernel	Linux 5.2 Git	Linux 5.2 Git + No Mitigations
SQLite - T.S.I (sec)	38.56	42.55	38.29
Normalized	99.3%	89.99%	100%
Standard Deviation	0.1%	7.3%	0.3%
Flexible IO Tester - Rand Read - Linux AIO -	8134	8232	8213
Yes - No - 2MB (MB/s)			
Normalized	98.81%	100%	99.77%
Standard Deviation	0.4%	0.2%	0.6%
Flexible IO Tester - Rand Write - Linux AIO -	4990	4954	5083
Yes - No - 2MB (MB/s)			
Normalized	98.17%	97.46%	100%
Standard Deviation	0.8%	1.3%	1%
Flexible IO Tester - Seq Read - Linux AIO -	7406	7443	7451
Yes - No - 2MB (MB/s)			
Normalized	99.4%	99.89%	100%
Standard Deviation	0.3%	0.3%	0.2%
Flexible IO Tester - Seq Write - Linux AIO -	4912	4882	5016
Yes - No - 2MB (MB/s)			
Normalized	97.93%	97.33%	100%
Standard Deviation	1.1%	1.1%	1.1%
Ethr - TCP - Latency - 1 (us)	15.54	17.35	14.05
Normalized	90.41%	80.98%	100%
Standard Deviation	1%	1.3%	1.1%
Ethr - TCP - Latency - 32 (us)	15.84	17.20	14.01
Normalized	88.45%	81.45%	100%
Standard Deviation	0.5%	0.9%	1.6%
Ethr - HTTP - Bandwidth - 1 (Mbits/s)	645.33	606.91	757.21
Normalized	85.22%	80.15%	100%
Standard Deviation	0.6%	0.1%	0.2%
Ethr - TCP - Bandwidth - 32 (Mbits/s)	342907	342630	255836
Normalized	100%	99.92%	74.61%
Standard Deviation	0.7%	0.7%	0.4%
Ethr - UDP - Bandwidth - 32 (Mbits/s)	254693	246367	243380
Normalized	100%	96.73%	95.56%
Standard Deviation	0.1%	0.1%	0.6%
Ethr - HTTP - Bandwidth - 32 (Mbits/s)	2283	2168	2259
Normalized	100%	94.98%	98.99%
Standard Deviation	0.8%	0.6%	0.7%
Ethr - TCP - Connections/s - 1	7220	6987	8563
(Connections/sec)			
Normalized	84.32%	81.6%	100%
Standard Deviation	0.2%	1%	0.1%
Ethr - TCP - Connections/s - 32	46929	43264	59892
(Connections/sec)			
Normalized	78.36%	72.24%	100%
Standard Deviation	36.7%	38.4%	19.1%
CP2K Molecular Dynamics - Fayalite-FIST	982.88	995.08	925.44
Data (sec)			
Normalized	94.16%	93%	100%
Bork File Encrypter - F.E.T (sec)	7.12	6.92	6.62
Normalized	92.98%	95.66%	100%
Standard Deviation	6%	4.4%	2.9%

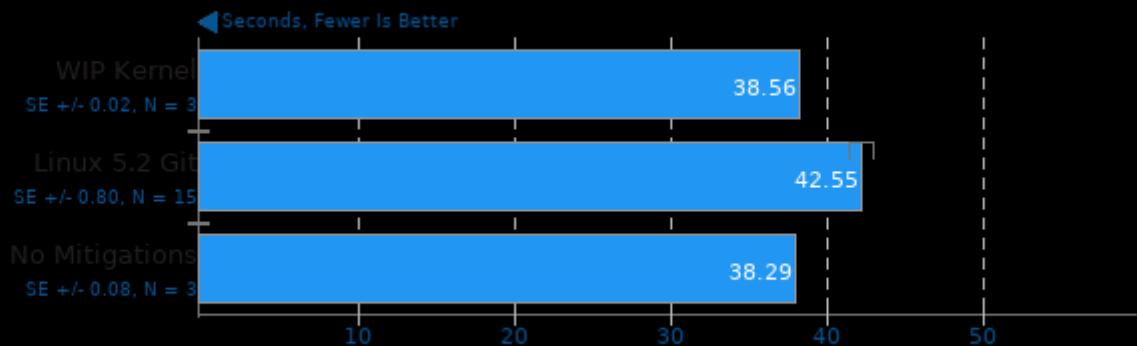
DaCapo Benchmark - H2 (msec)	6078	6027	5978
Normalized	98.35%	99.19%	100%
Standard Deviation	0.7%	2%	1.2%
DaCapo Benchmark - Jython (msec)	3961	3932	3932
Normalized	99.27%	100%	100%
Standard Deviation	1.5%	0.7%	1.8%
DaCapo Benchmark - Tradesoap (msec)	4537	4634	4504
Normalized	99.27%	97.19%	100%
Standard Deviation	1.9%	2.5%	0.7%
DaCapo Benchmark - Tradebeans (msec)	7678	7710	7552
Normalized	98.36%	97.95%	100%
Standard Deviation	2%	0.8%	1.2%
Renaissance - Scala Dotty (ms)	6393	6454	6404
Normalized	100%	99.07%	99.83%
Standard Deviation	0.8%	0.8%	1%
Renaissance - Savina Reactors.IO (ms)	20116	22359	23475
Normalized	100%	89.97%	85.69%
Standard Deviation	9.2%	12.1%	12%
Renaissance - I.M.D.S (ms)	8123	8456	7936
Normalized	97.7%	93.85%	100%
Standard Deviation	2.3%	1.6%	2.6%
Renaissance - A.U.C.T (ms)	12293	12636	12232
Normalized	99.5%	96.8%	100%
Standard Deviation	2.9%	2.8%	3.5%
SVT-AV1 - 1.8.b.Y.T.A.V.E (FPS)	45.81	46.01	46.25
Normalized	99.05%	99.48%	100%
Standard Deviation	1.3%	1%	0.4%
VP9 libvpx Encoding - v.V.1.V.E (FPS)	98.10	96.61	98.69
Normalized	99.4%	97.89%	100%
Standard Deviation	0.5%	0.7%	0.7%
Go Benchmarks - http (ns/op)	5408	5141	6297
Normalized	95.06%	100%	81.64%
Standard Deviation	2.6%	1.2%	2.5%
Go Benchmarks - json (ns/op)	3151885	3152208	3148516
Normalized	99.89%	99.88%	100%
Standard Deviation	0.2%	0.6%	0.5%
Go Benchmarks - build (ns/op)	18713816181	18700319464	18087422282
Normalized	96.65%	96.72%	100%
Standard Deviation	2%	1.4%	1.8%
Go Benchmarks - garbage (ns/op)	707908	704601	707828
Normalized	99.53%	100%	99.54%
Standard Deviation	0.5%	0.6%	0.6%
Timed Linux Kernel Compilation - Time To	42.02	42.05	40.81
Compile (sec)			
Normalized	97.12%	97.05%	100%
Standard Deviation	3%	2.9%	2.9%
Zstd Compression - C.u.1.0.3.s.i.i.C.L.1 (sec)	10.00	9.95	9.90
Normalized	99%	99.5%	100%
Standard Deviation	0.3%	0.1%	0.4%
glibc bench - cos (nanoseconds)	32989	32938	32907
Normalized	99.75%	99.91%	100%
Standard Deviation	0.3%	0%	0%
glibc bench - ffs (nanoseconds)	1.73	1.73	1.49
Normalized	86.13%	86.13%	100%
Standard Deviation	0.1%	0.1%	0.1%

glibc bench - sin (nanoseconds)	32935	32886	32913
Normalized	99.85%	100%	99.92%
Standard Deviation	0.1%	0%	0.1%
glibc bench - sqrt (nanoseconds)	1.73	1.73	1.50
Normalized	86.71%	86.71%	100%
Standard Deviation	0.1%	0%	0.1%
glibc bench - tanh (nanoseconds)	12.24	12.24	12.00
Normalized	98.04%	98.04%	100%
Standard Deviation	0%	0.1%	0.1%
glibc bench - ffsll (nanoseconds)	1.73	1.73	1.50
Normalized	86.71%	86.71%	100%
Standard Deviation	0.1%	0.1%	0.2%
glibc bench - pthread_once (nanoseconds)	1.73	1.73	1.50
Normalized	86.71%	86.71%	100%
Standard Deviation	0.1%	0.2%	0.1%
PostgreSQL pgbench - Buffer Test - Normal	485788		
Load - Read Only (TPS)			
Normalized	92.61%	91.98%	100%
Standard Deviation	1.8%	1%	0.3%
PostgreSQL pgbench - Buffer Test - Normal	12358		
Load - Read Write (TPS)			
Normalized	99.45%	98.64%	100%
Standard Deviation	1.2%	0.6%	0.3%
Stress-NG - Semaphores (Bogo Ops/s)	2958760	3039286	3185240
Normalized	92.89%	95.42%	100%
Standard Deviation	2.2%	2.3%	1.5%
Stress-NG - Socket Activity (Bogo Ops/s)	11294	11765	17204
Normalized	65.65%	68.39%	100%
Standard Deviation	2.9%	2.4%	3.4%
Stress-NG - Context Switching (Bogo Ops/s)	13257819	13792201	27306023
Normalized	48.55%	50.51%	100%
Standard Deviation	0.3%	0%	4.1%
Stress-NG - S.V.M.P (Bogo Ops/s)	7804267		
Normalized	97.51%	94.63%	100%
Standard Deviation	0.1%	0%	0.1%
ctx_clock - C.S.T (Clocks)	631	631	112
Normalized	17.75%	17.75%	100%
Standard Deviation	0.2%	0.2%	
Apache Benchmark - S.W.P.S (Reqs/sec)	31209	25869	31184
Normalized	100%	82.89%	99.92%
Standard Deviation	0.6%	2.8%	2.9%
Apache Siege - 50 (Transactions/sec)	37764	35612	35817
Normalized	100%	94.3%	94.84%
Standard Deviation	6.7%	2.9%	0.5%
Apache Siege - 100 (Transactions/sec)	37388		
Normalized	97.77%	97.67%	100%
Standard Deviation	2%	1.1%	0.9%
Apache Siege - 200 (Transactions/sec)	32673	32677	34387
Normalized	95.02%	95.03%	100%
Standard Deviation	0.5%	0.6%	4.6%
Apache Siege - 250 (Transactions/sec)	38128	44931	43470
Normalized	84.86%	100%	96.75%
Standard Deviation	16.3%	8.8%	9.7%
Hackbench - 1 - Thread (sec)	3.11	3.07	2.54
Normalized	81.67%	82.74%	100%

	Standard Deviation	0.7%	0.9%	0.9%
Hackbench - 2 - Thread (sec)	4.85	4.99	3.52	
	Normalized	72.58%	70.54%	100%
	Standard Deviation	0.8%	0.3%	0.1%
Hackbench - 4 - Thread (sec)	8.13	8.38	8.74	
	Normalized	100%	97.02%	93.02%
	Standard Deviation	0.2%	0.5%	1.8%
Hackbench - 8 - Thread (sec)	15.28	18.59	20.82	
	Normalized	100%	82.19%	73.39%
	Standard Deviation	8.8%	18.9%	4.6%
Hackbench - 1 - Process (sec)	3.11	2.96	2.29	
	Normalized	73.63%	77.36%	100%
	Standard Deviation	0.6%	1.7%	1.8%
Hackbench - 16 - Thread (sec)	27.78	28.39	37.50	
	Normalized	100%	97.85%	74.08%
	Standard Deviation	0.3%	3%	0.7%
Hackbench - 2 - Process (sec)	4.63	4.74	3.21	
	Normalized	69.33%	67.72%	100%
	Standard Deviation	0.3%	0.2%	0.3%
Hackbench - 4 - Process (sec)	7.80	7.94	6.51	
	Normalized	83.46%	81.99%	100%
	Standard Deviation	0.2%	0.2%	20.7%
Hackbench - 8 - Process (sec)	14.00	14.15	13.72	
	Normalized	98%	96.96%	100%
	Standard Deviation	0.1%	0.1%	30.5%
Hackbench - 16 - Process (sec)	27.11	27.50	18.90	
	Normalized	69.72%	68.73%	100%
	Standard Deviation	1.5%	2.1%	2.8%
Hackbench - 32 - Process (sec)	53.44	53.74	33.43	
	Normalized	62.56%	62.21%	100%
	Standard Deviation	1.6%	0.8%	0.2%
Selenium - ARES-6 - Firefox (ms)	70.57	70.79	56.89	
	Normalized	80.61%	80.36%	100%
	Standard Deviation	0.6%	1.4%	0.9%
Selenium - Octane - Firefox (Geometric)	30807	30857	35726	
	Normalized	86.23%	86.37%	100%
	Standard Deviation	0.9%	0.4%	1.1%
Selenium - Jetstream - Firefox (Score)	170.95	171.11	202.23	
	Normalized	84.53%	84.61%	100%
	Standard Deviation	0.3%	0.2%	0%
Selenium - ARES-6 - Google Chrome (ms)	30.27	30.19	21.12	
	Normalized	69.77%	69.96%	100%
	Standard Deviation	0.3%	0.7%	0.8%
Selenium - Octane - Google Chrome	36565 (Geometric Mean)	36502	49942	
	Normalized	73.21%	73.09%	100%
	Standard Deviation	0.3%	0.4%	0.4%
Selenium - Jetstream - Google Chrome	161.82	162.81	217.85	
	Normalized	74.28%	74.73%	100%
	Standard Deviation	1.1%	0.3%	0.6%

SQLite 3.22

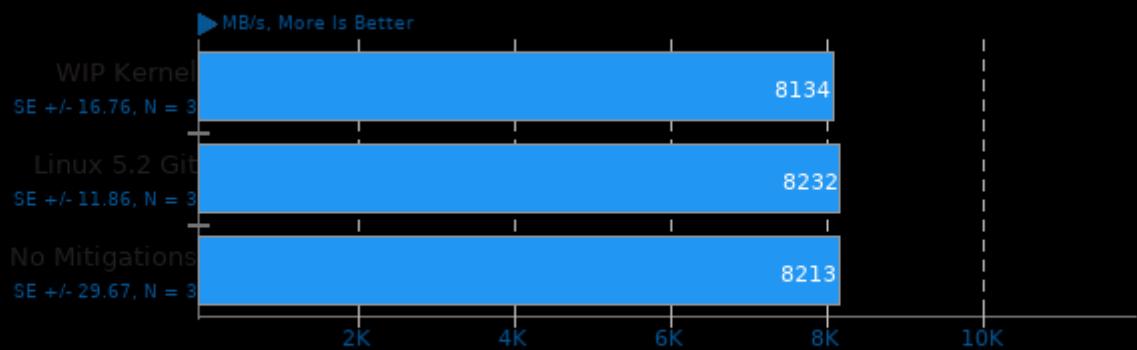
Timed SQLite Insertions



1. (CC) gcc options: -O2 -lz -ldl -lpthread

Flexible IO Tester 3.1

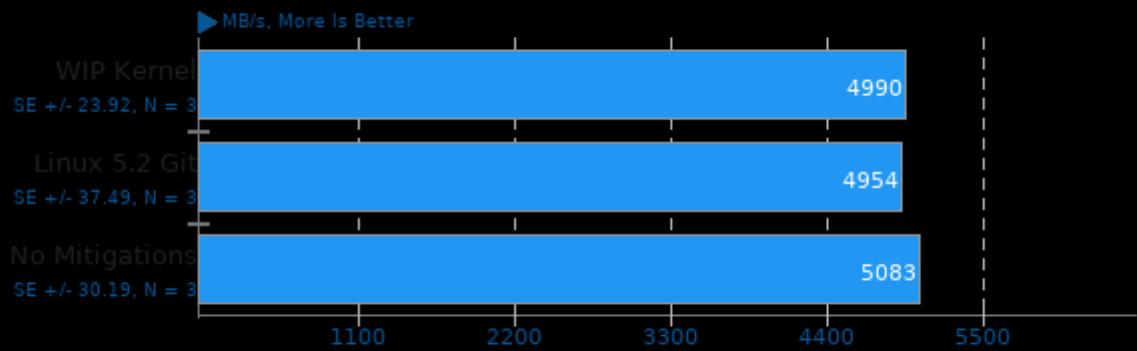
Type: Random Read - IO Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 2MB - Disk Target: Default Test Directory



1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -I -lnuma -libverbs -Irt -laio -lz -lm -lpthread -ldl

Flexible IO Tester 3.1

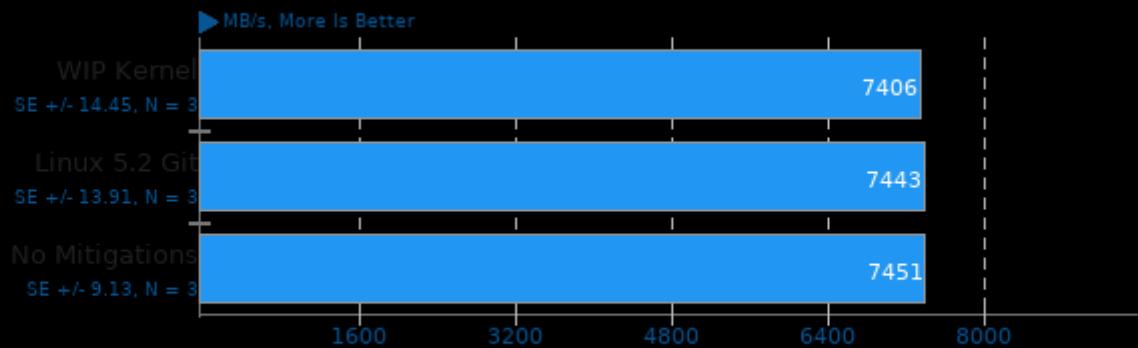
Type: Random Write - IO Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 2MB - Disk Target: Default Test Directory



1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -I -lnuma -libverbs -Irt -laio -lz -lm -lpthread -ldl

Flexible IO Tester 3.1

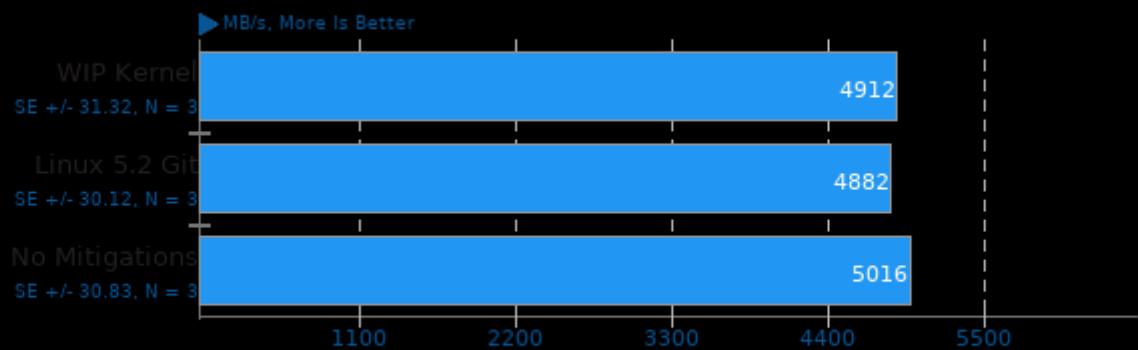
Type: Sequential Read - IO Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 2MB - Disk Target: Default Test Directory



1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -fl -Inuma -libverbs -lrt -laio -lz -lm -lpthread -ldl

Flexible IO Tester 3.1

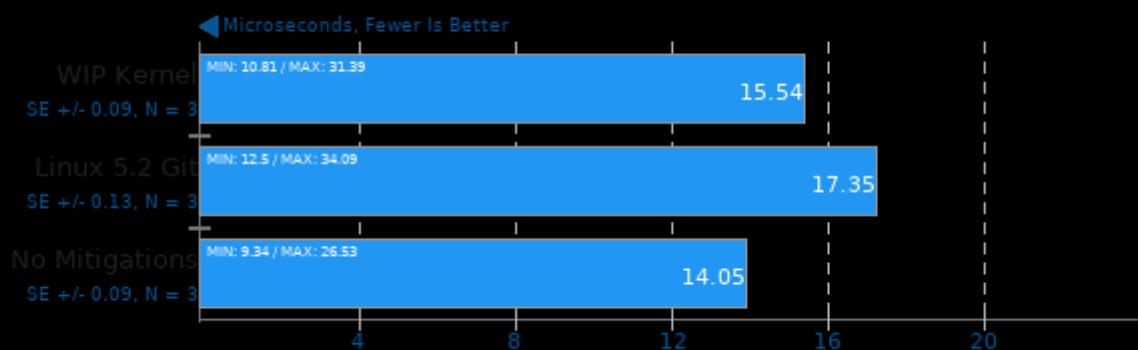
Type: Sequential Write - IO Engine: Linux AIO - Buffered: Yes - Direct: No - Block Size: 2MB - Disk Target: Default Test Directory



1. (CC) gcc options: -rdynamic -std=gnu99 -ffast-math -include -O3 -U_FORTIFY_SOURCE -fl -Inuma -libverbs -lrt -laio -lz -lm -lpthread -ldl

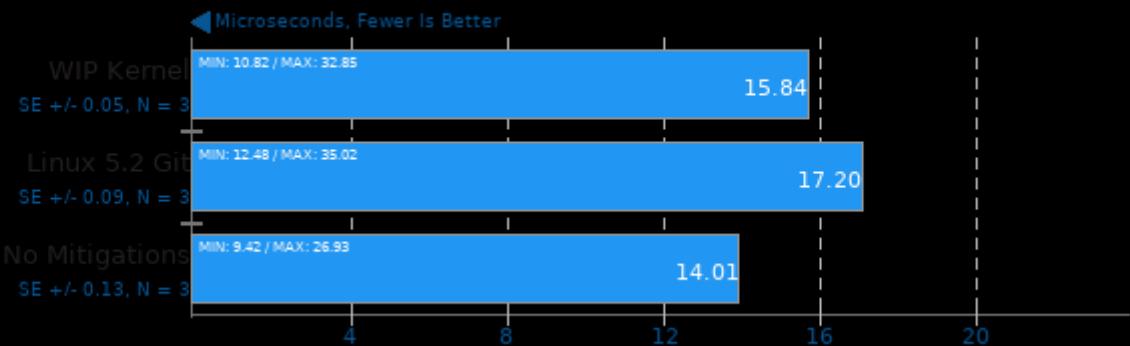
Ethr 2019-01-02

Server Address: localhost - Protocol: TCP - Test: Latency - Threads: 1



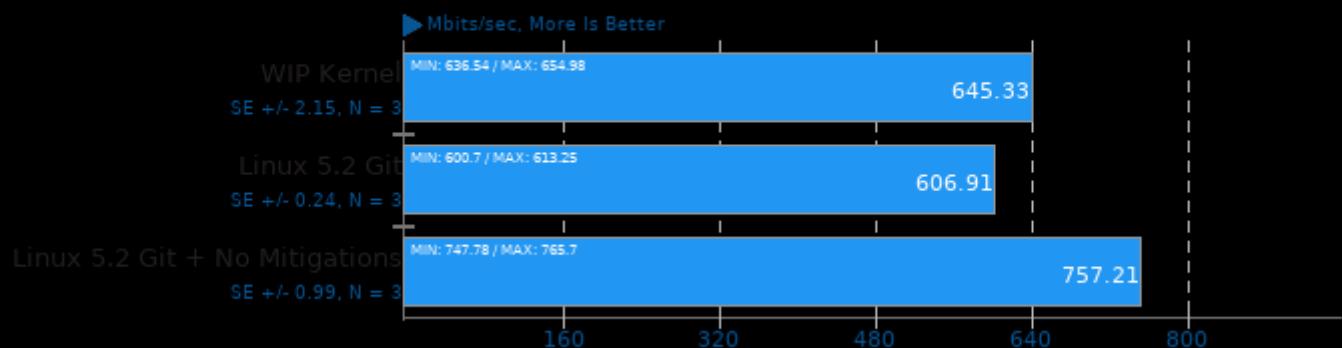
Ethr 2019-01-02

Server Address: localhost - Protocol: TCP - Test: Latency - Threads: 32



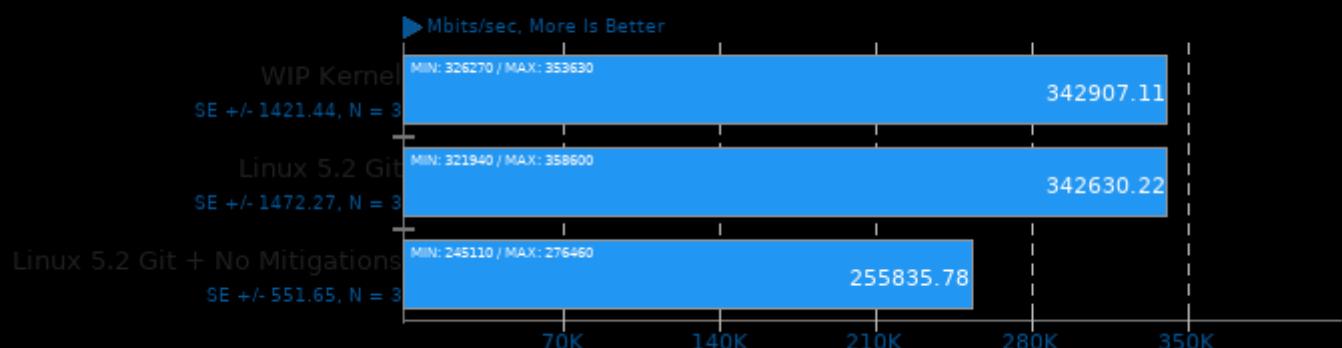
Ethr 2019-01-02

Server Address: localhost - Protocol: HTTP - Test: Bandwidth - Threads: 1



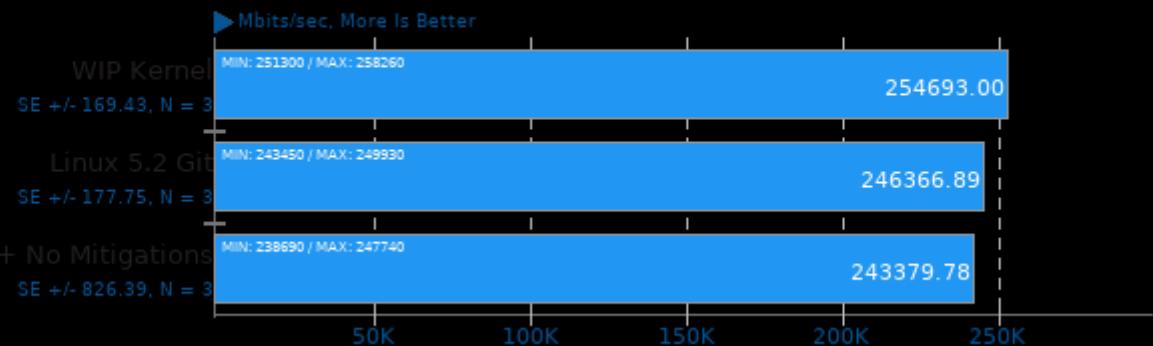
Ethr 2019-01-02

Server Address: localhost - Protocol: TCP - Test: Bandwidth - Threads: 32



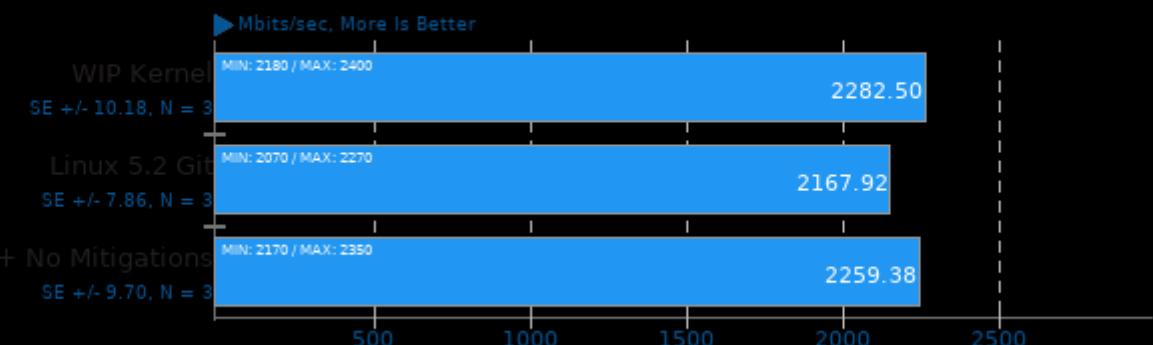
Ethr 2019-01-02

Server Address: localhost - Protocol: UDP - Test: Bandwidth - Threads: 32



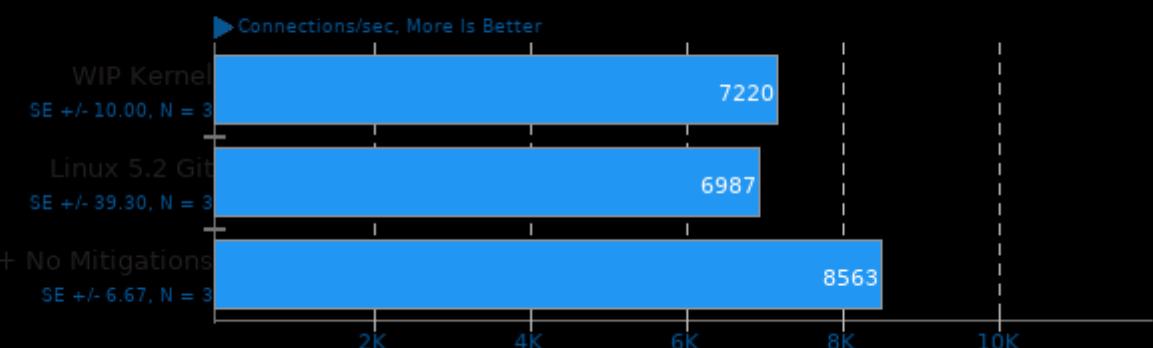
Ethr 2019-01-02

Server Address: localhost - Protocol: HTTP - Test: Bandwidth - Threads: 32



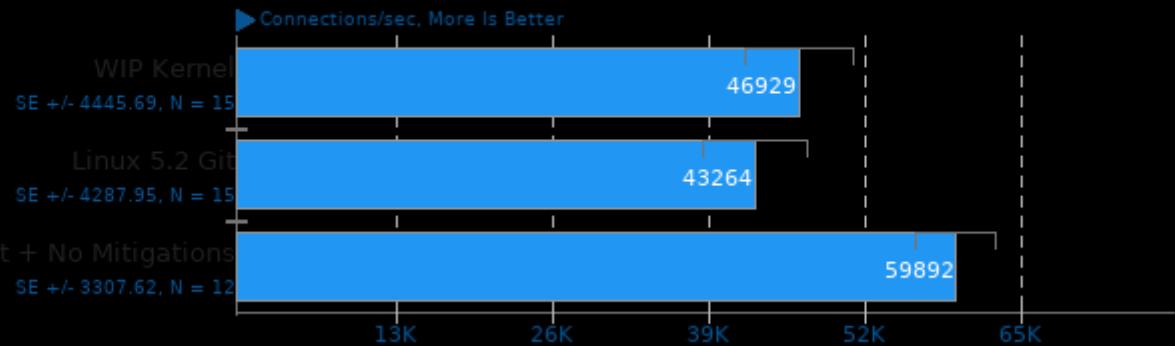
Ethr 2019-01-02

Server Address: localhost - Protocol: TCP - Test: Connections/s - Threads: 1



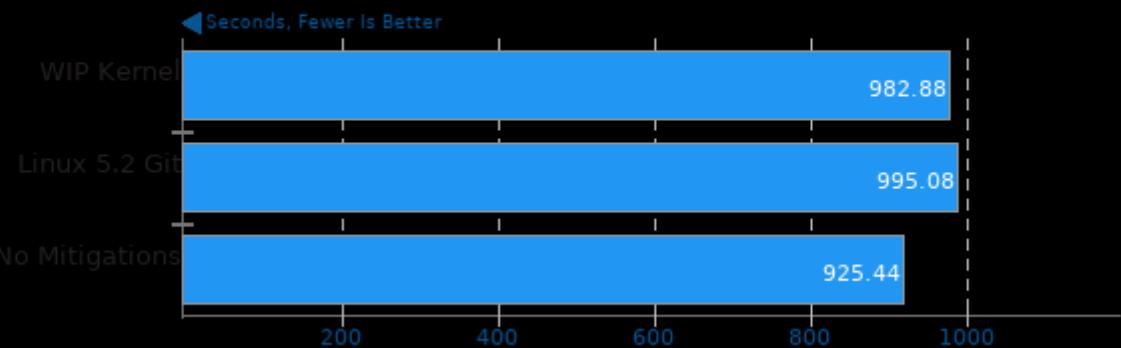
Ethr 2019-01-02

Server Address: localhost - Protocol: TCP - Test: Connections/s - Threads: 32



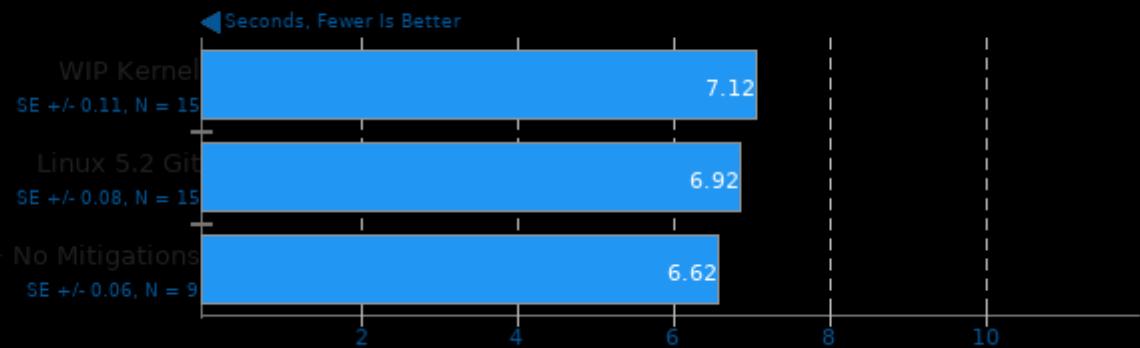
CP2K Molecular Dynamics 6.1

Fayalite-FIST Data



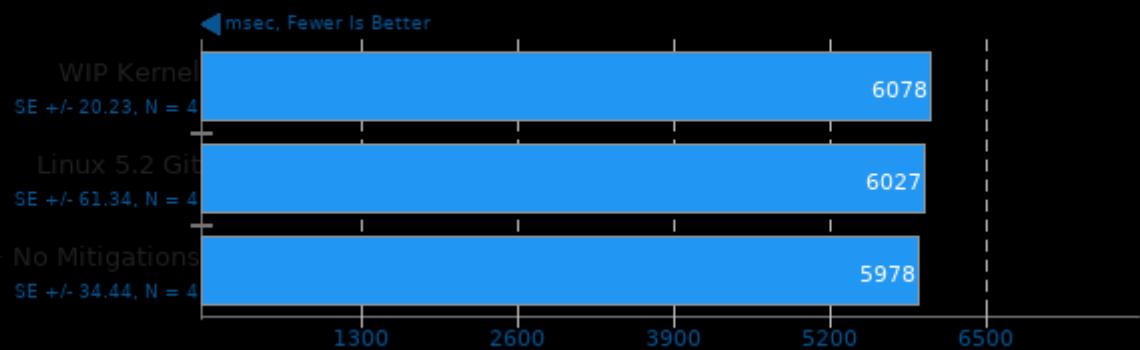
Bork File Encrypter 1.4

File Encryption Time



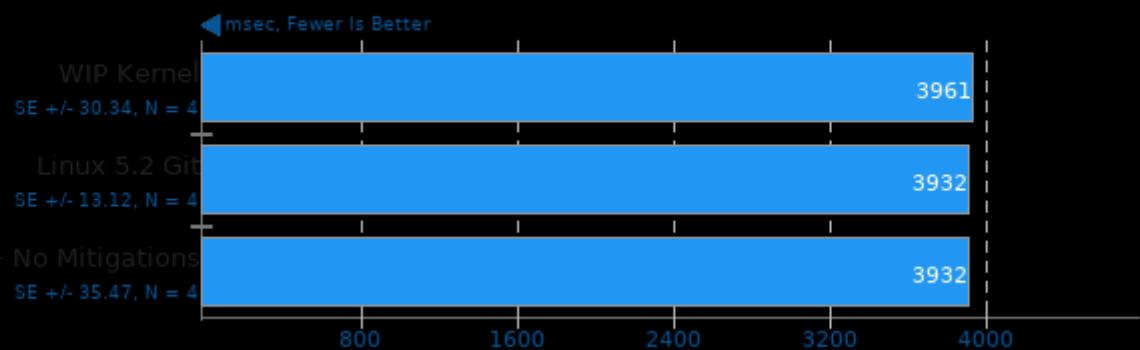
DaCapo Benchmark 9.12-MR1

Java Test: H2



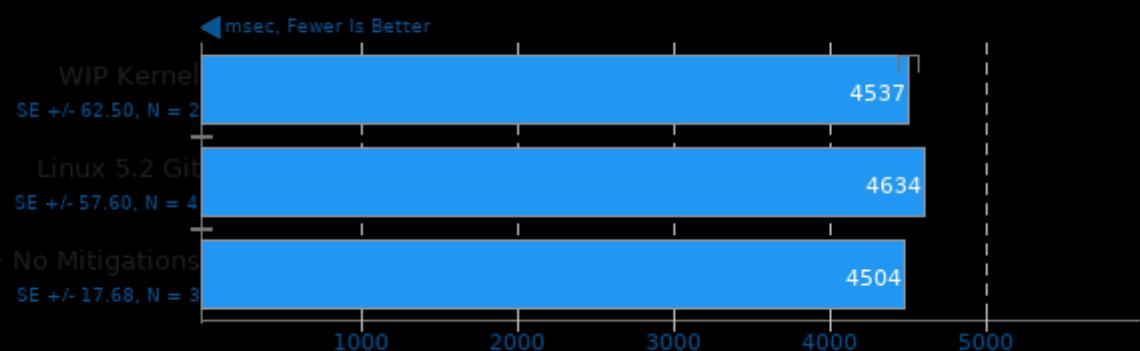
DaCapo Benchmark 9.12-MR1

Java Test: Jython



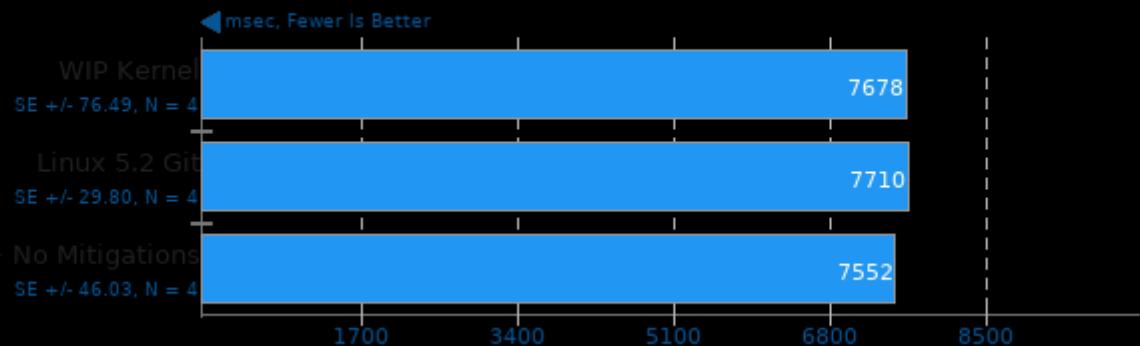
DaCapo Benchmark 9.12-MR1

Java Test: Tradessoap



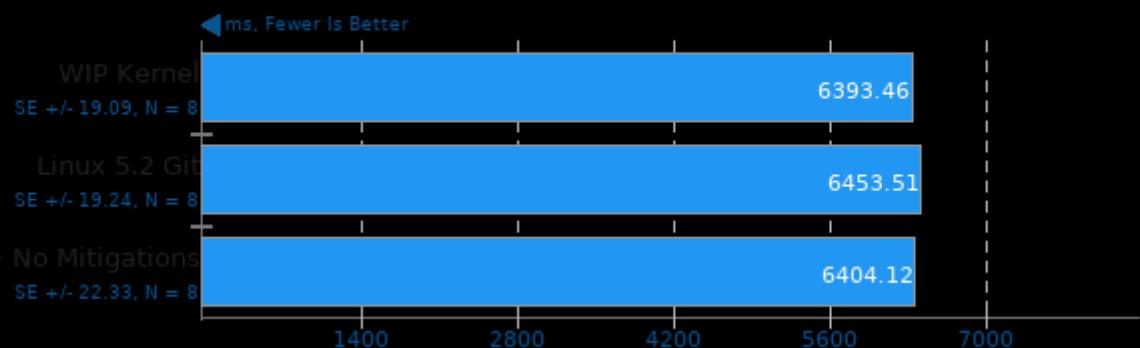
DaCapo Benchmark 9.12-MR1

Java Test: Tradebeans



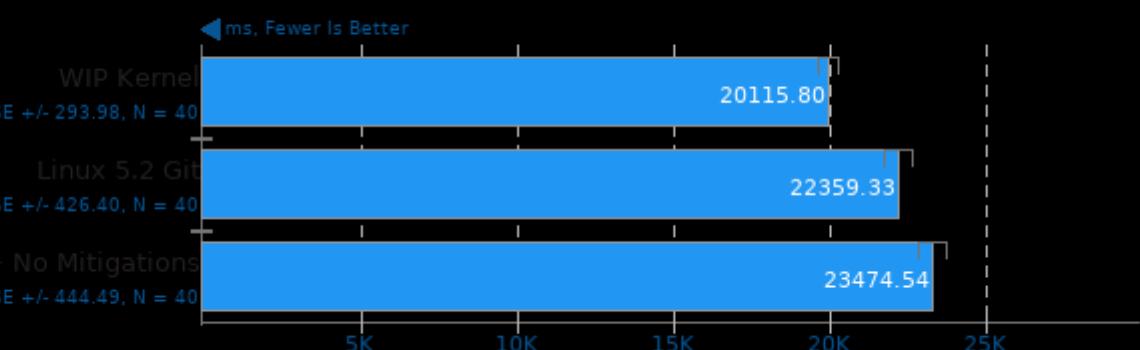
Renaissance 0.9.0

Test: Scala Dotty



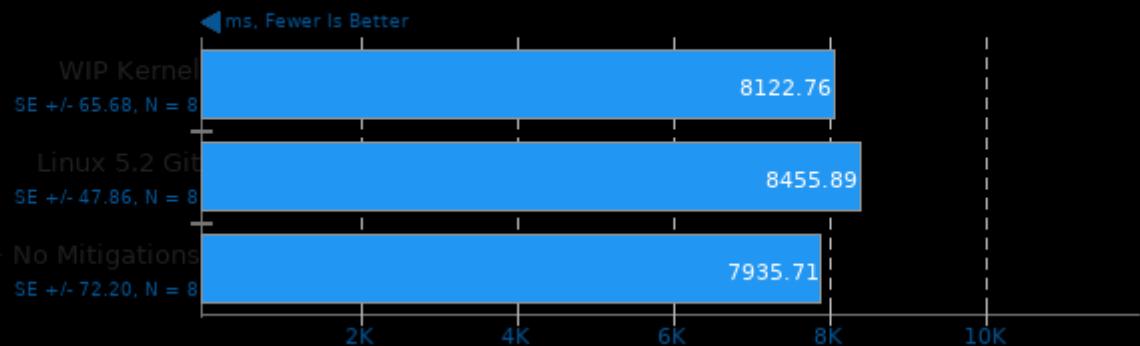
Renaissance 0.9.0

Test: Savina Reactors.IO



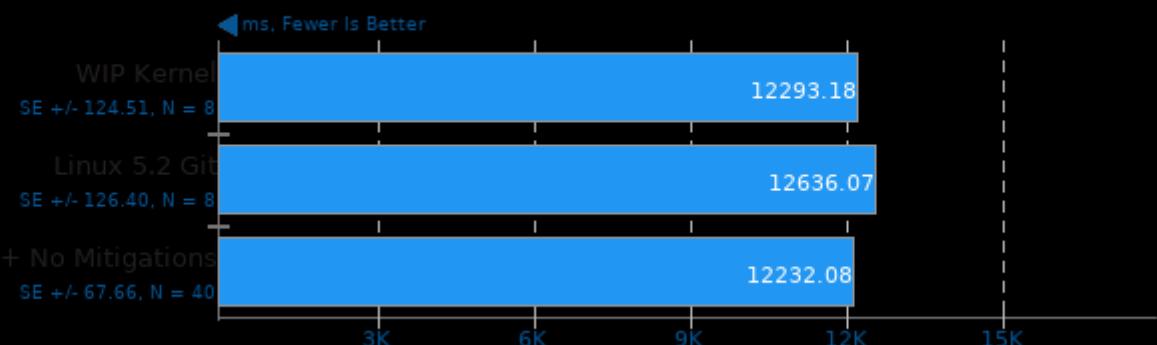
Renaissance 0.9.0

Test: In-Memory Database Shootout



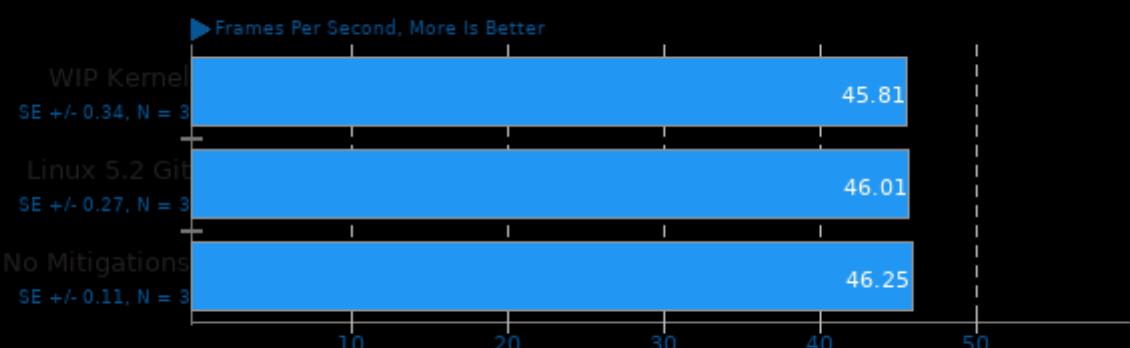
Renaissance 0.9.0

Test: Akka Unbalanced Cobwebbed Tree



SVT-AV1 0.5

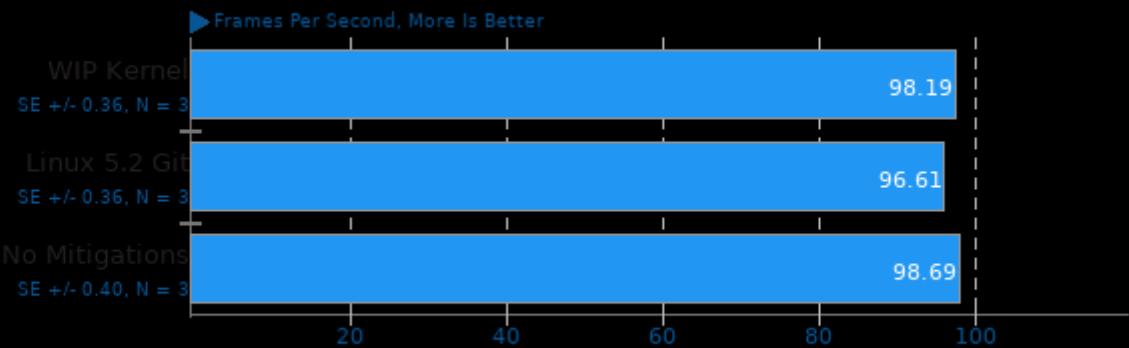
1080p 8-bit YUV To AV1 Video Encode



1. (CXX) g++ options: -O3 -pie -lpthread -lm

VP9 libvpx Encoding 1.8.0

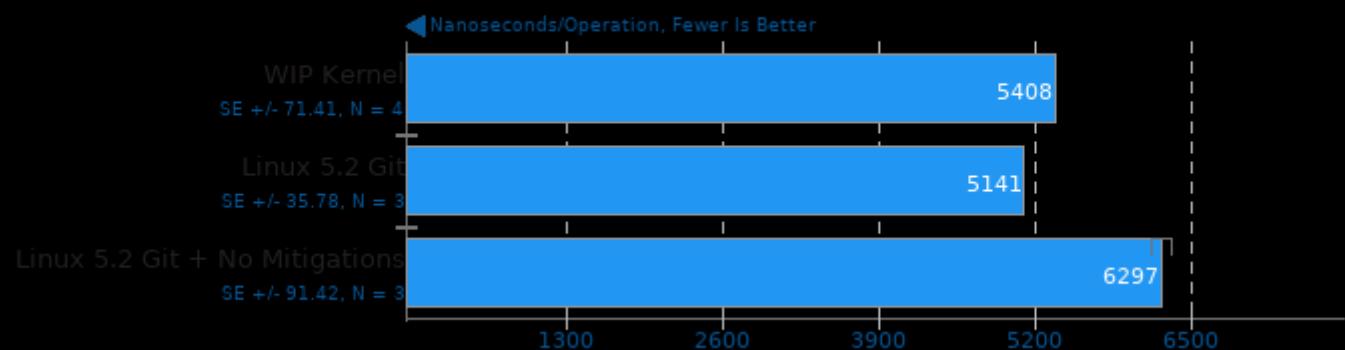
vpxenc VP9 1080p Video Encode



1. (CXX) g++ options: -m64 -lm -lpthread -O3 -fPIC -U_FORTIFY_SOURCE -std=c++11

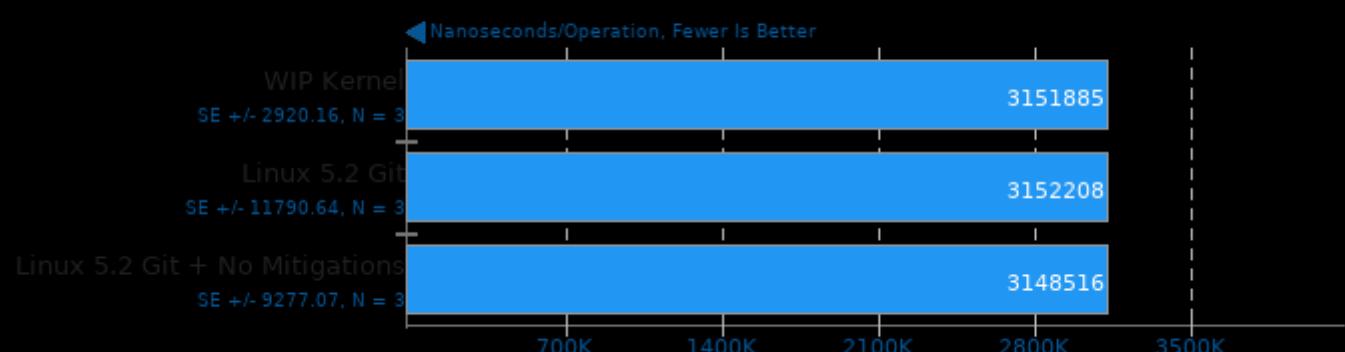
Go Benchmarks

Test: http



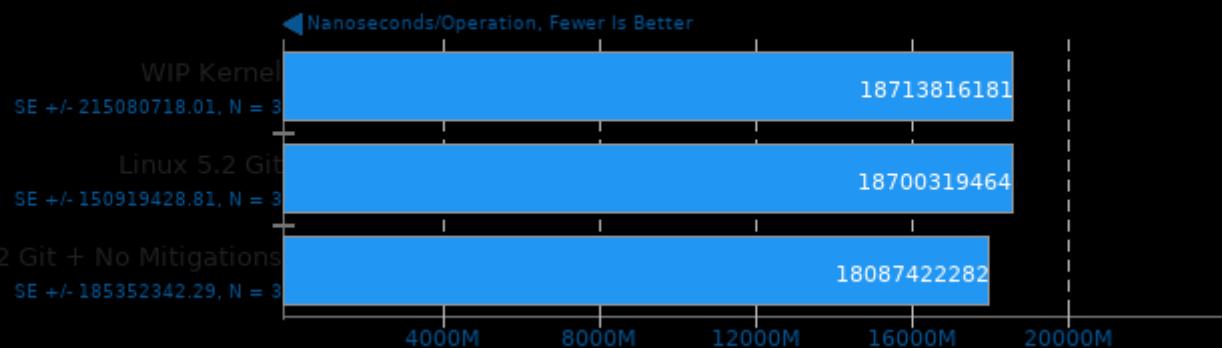
Go Benchmarks

Test: json



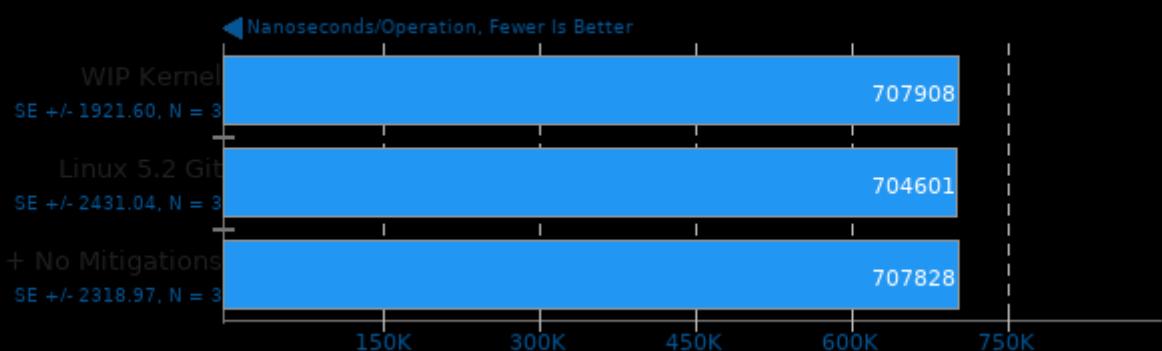
Go Benchmarks

Test: build



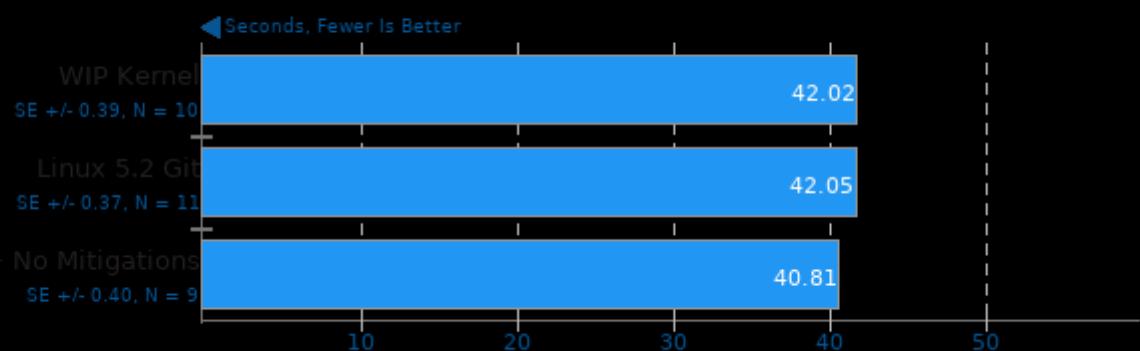
Go Benchmarks

Test: garbage



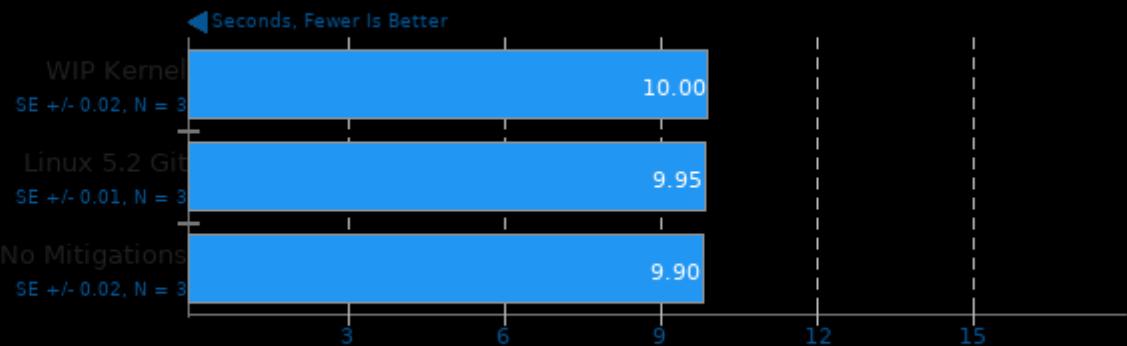
Timed Linux Kernel Compilation 4.18

Time To Compile



Zstd Compression 1.3.4

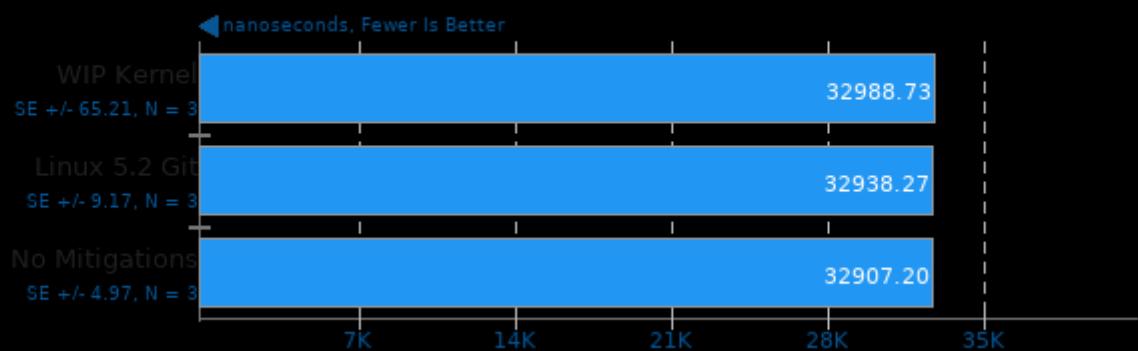
Compressing ubuntu-16.04.3-server-i386.img, Compression Level 19



1. (CC) gcc options: -O3 -pthread -lz

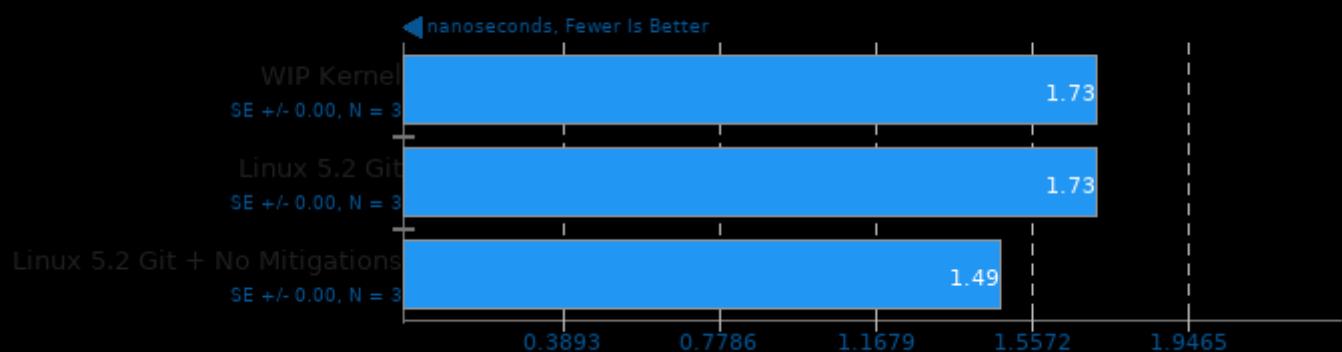
glibc bench 1.0

Benchmark: cos



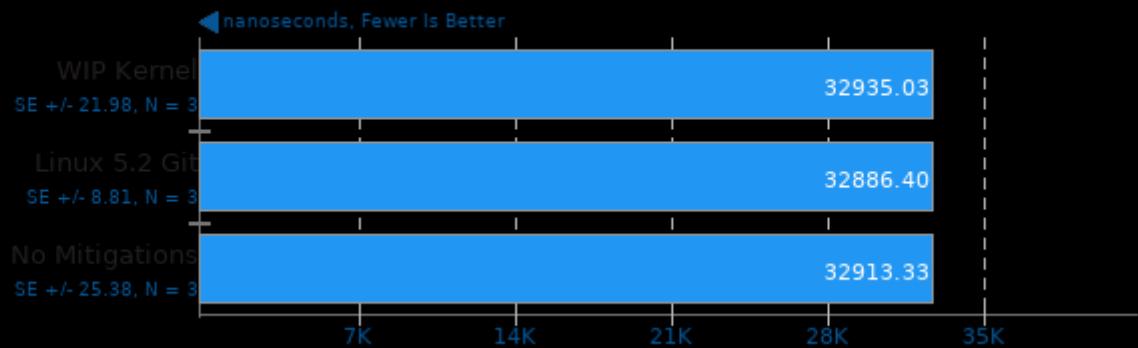
glibc bench 1.0

Benchmark: ffs

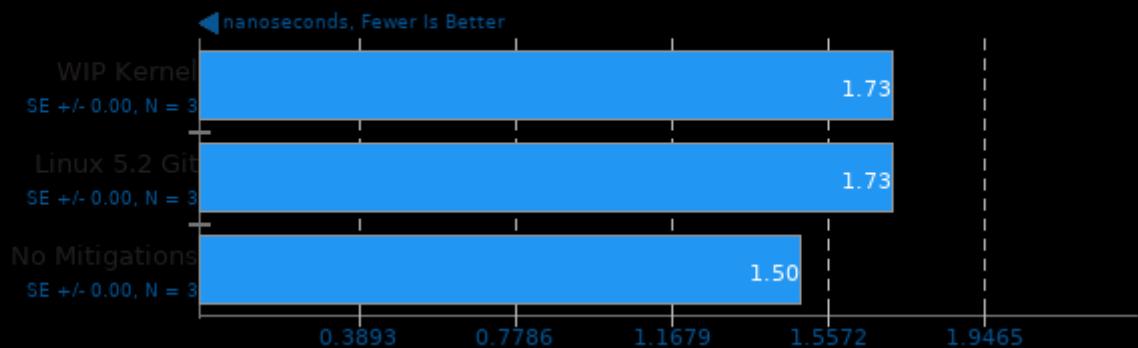


glibc bench 1.0

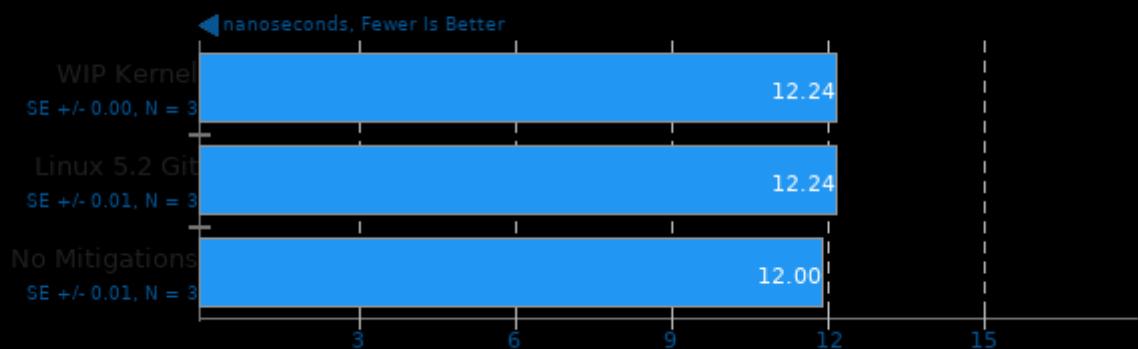
Benchmark: sin

**glibc bench 1.0**

Benchmark: sqrt

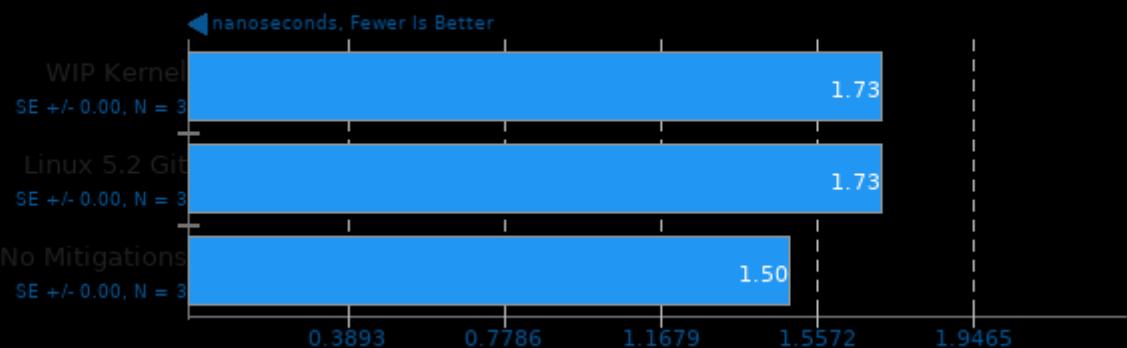
**glibc bench 1.0**

Benchmark: tanh



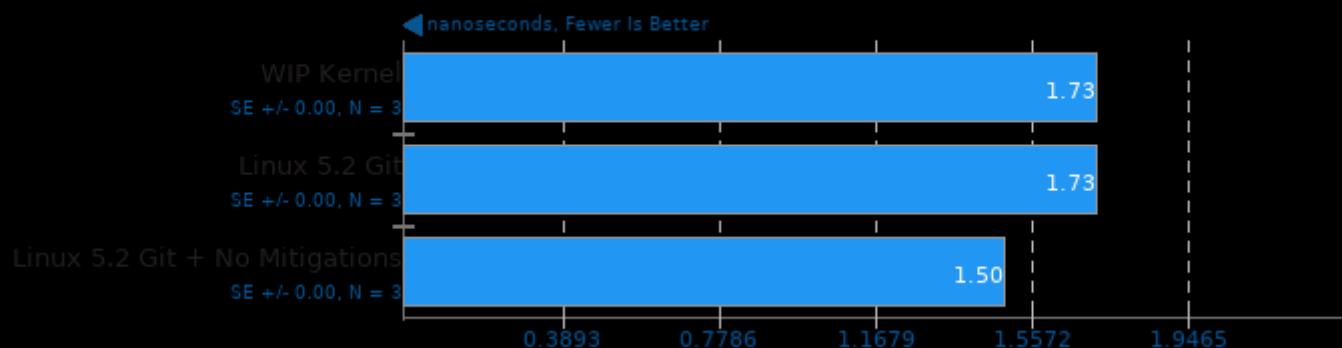
glibc bench 1.0

Benchmark: ffsll



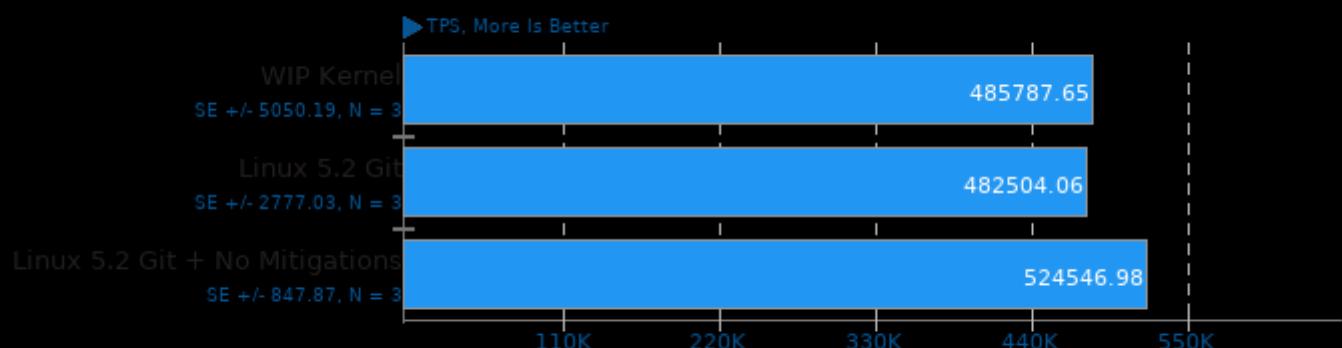
glibc bench 1.0

Benchmark: pthread_once



PostgreSQL pgbench 10.3

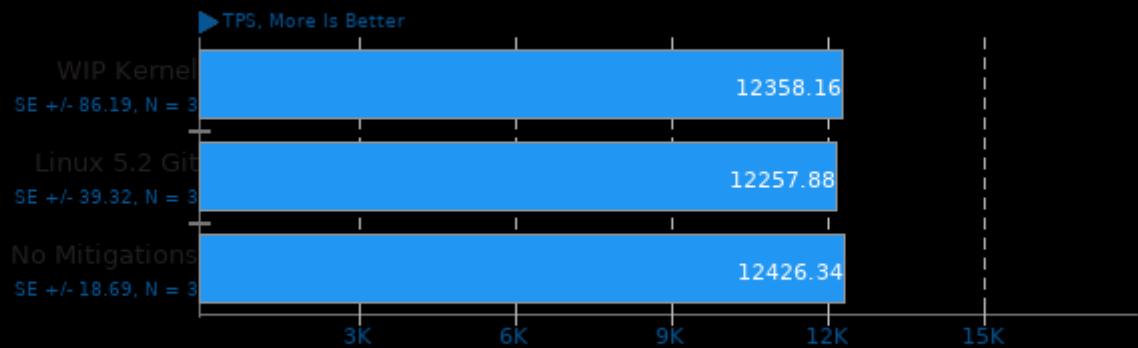
Scaling: Buffer Test - Test: Normal Load - Mode: Read Only



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -lpthread -lrt -lcrypt -ldl -lm

PostgreSQL pgbench 10.3

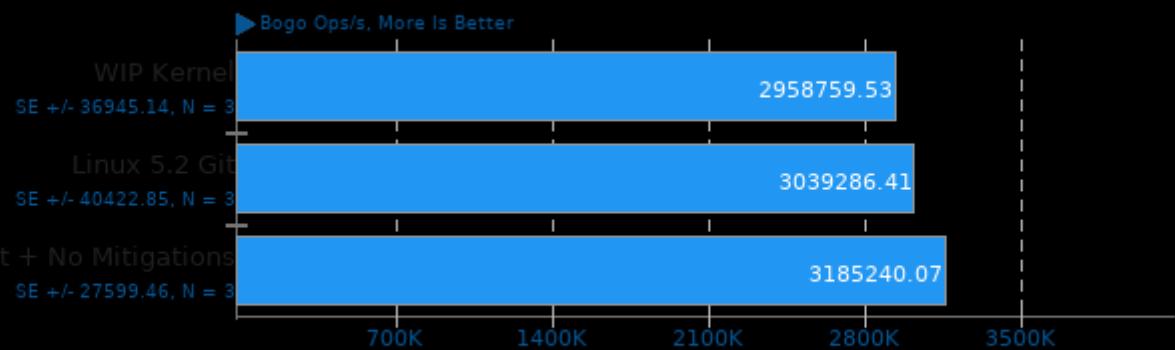
Scaling: Buffer Test - Test: Normal Load - Mode: Read Write



1. (CC) gcc options: -fno-strict-aliasing -fwrapv -O2 -lpgcommon -lpgport -lpq -pthread -lrt -lcrypt -ldl -lm

Stress-NG 0.07.26

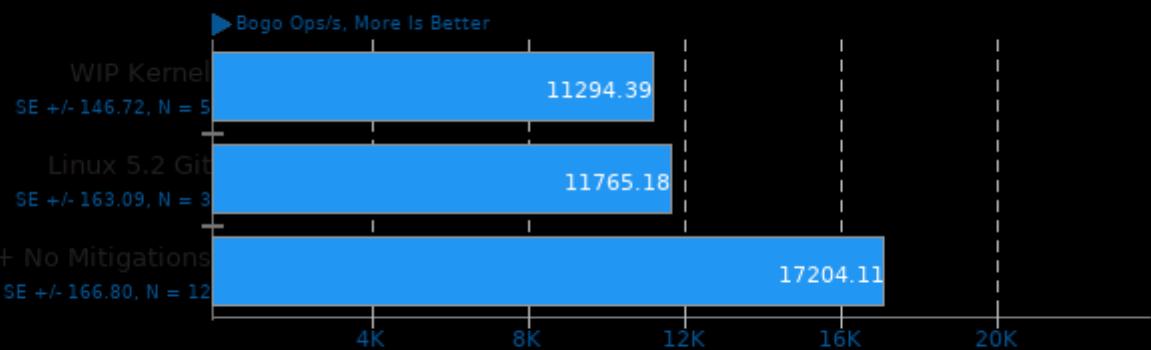
Test: Semaphores



1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -pthread -laio -lc

Stress-NG 0.07.26

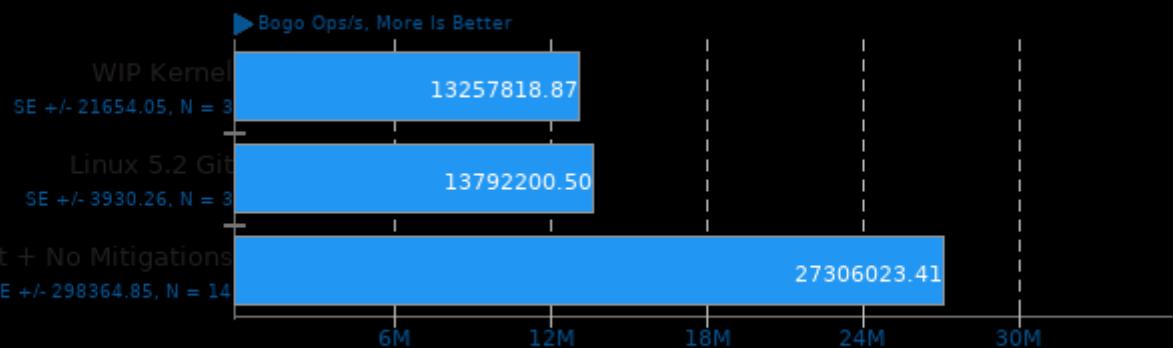
Test: Socket Activity



1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -pthread -laio -lc

Stress-NG 0.07.26

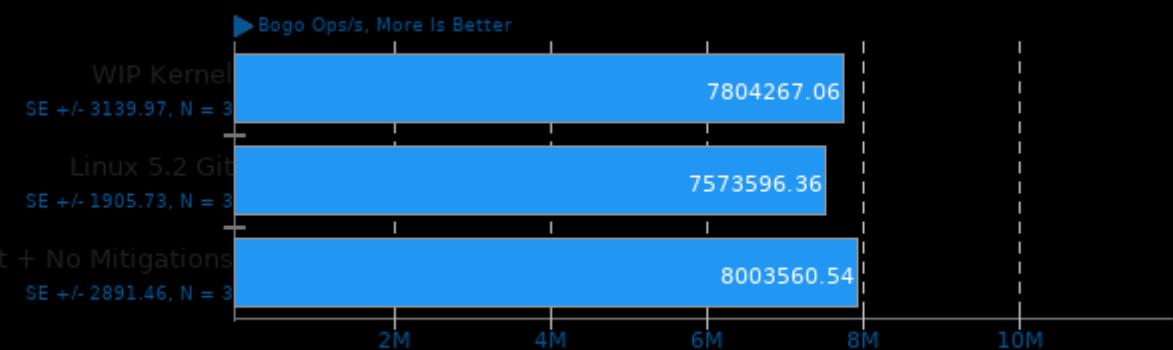
Test: Context Switching



1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc

Stress-NG 0.07.26

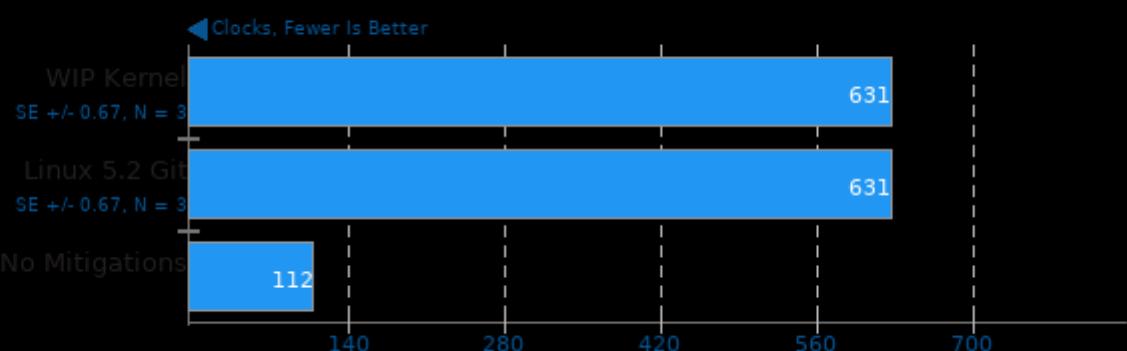
Test: System V Message Passing



1. (CC) gcc options: -O2 -std=gnu99 -lm -lz -lcrypt -lrt -lpthread -laio -lc

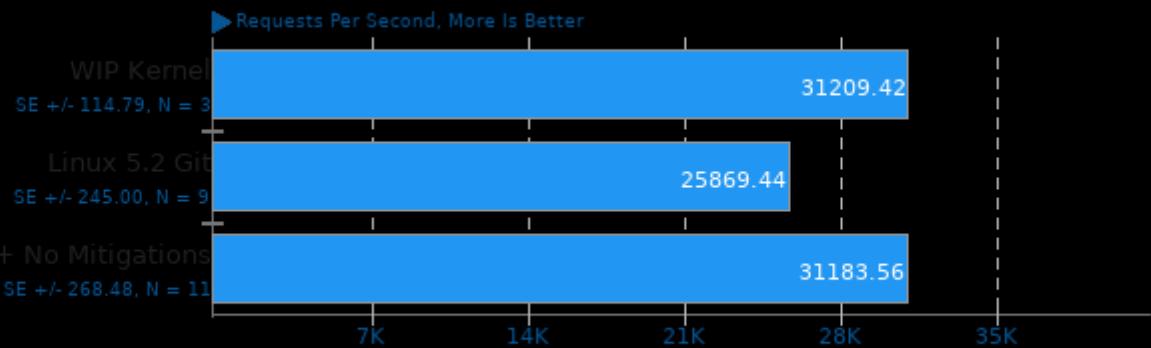
ctx_clock

Context Switch Time



Apache Benchmark 2.4.29

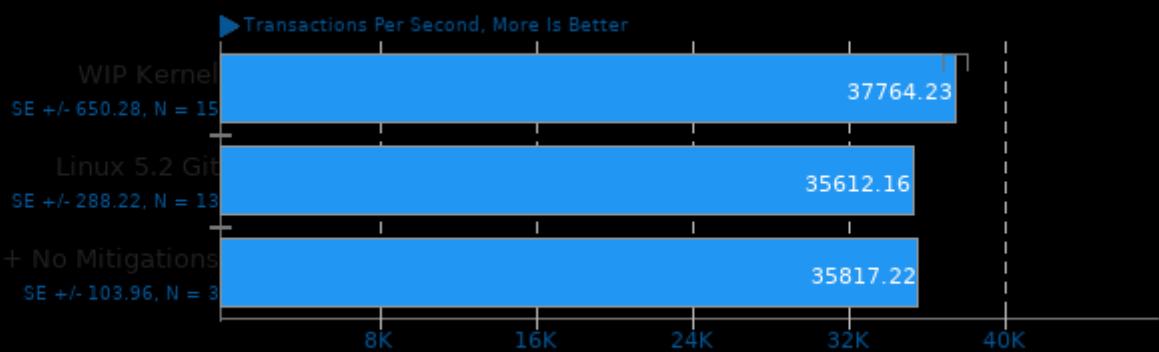
Static Web Page Serving



1. (CC) gcc options: -fPIC -O2 -pthread

Apache Siege 2.4.29

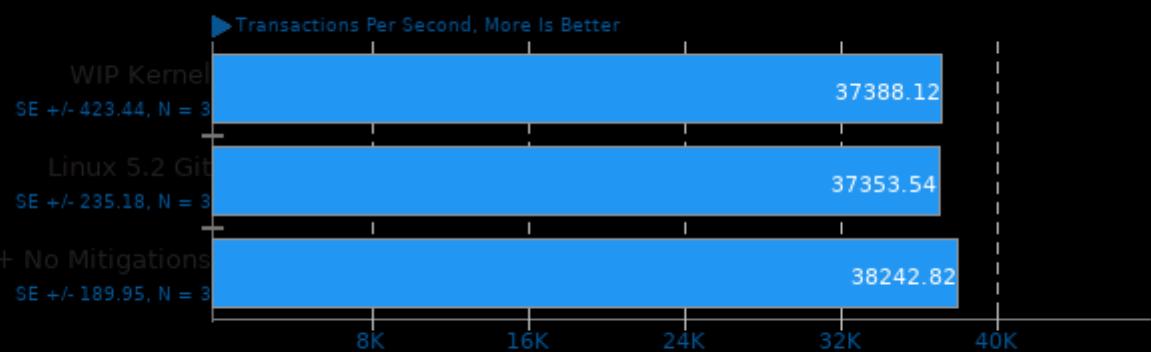
Concurrent Users: 50



1. (CC) gcc options: -O2 -lpthread -ldl -lssl -lcrypto

Apache Siege 2.4.29

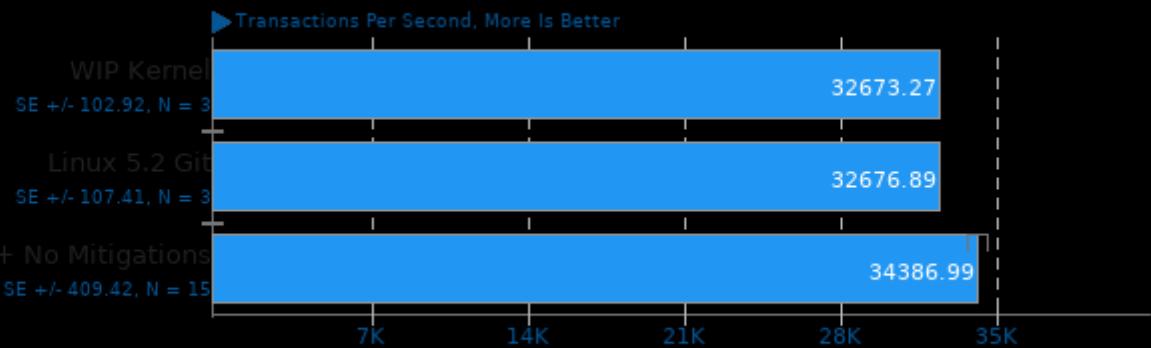
Concurrent Users: 100



1. (CC) gcc options: -O2 -lpthread -ldl -lssl -lcrypto

Apache Siege 2.4.29

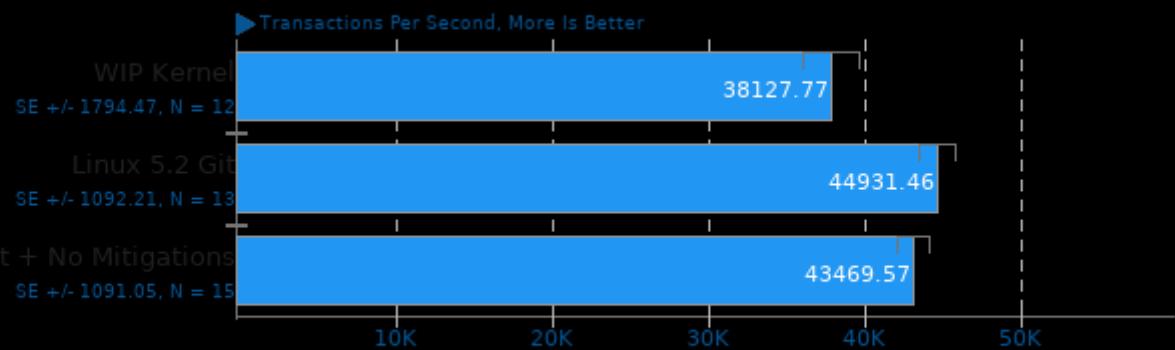
Concurrent Users: 200



1. (CC) gcc options: -O2 -lpthread -ldl -lssl -lcrypto

Apache Siege 2.4.29

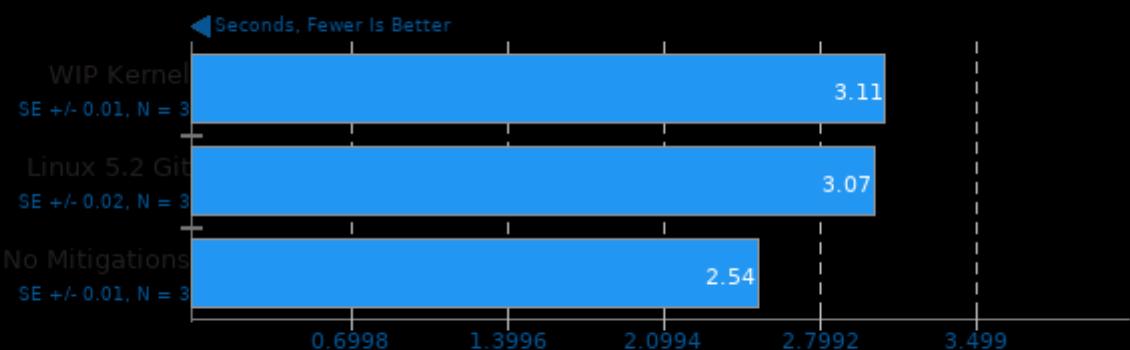
Concurrent Users: 250



1. (CC) gcc options: -O2 -lpthread -ldl -lssl -lcrypto

Hackbench

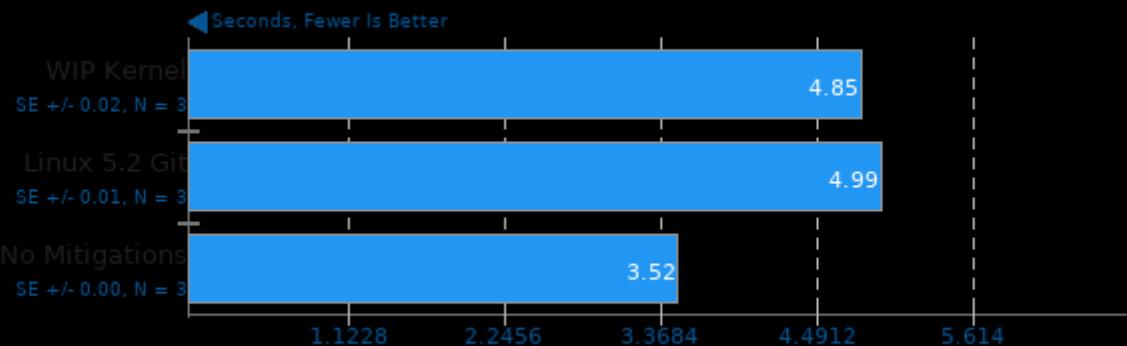
Count: 1 - Type: Thread



1. (CC) gcc options: -lpthread

Hackbench

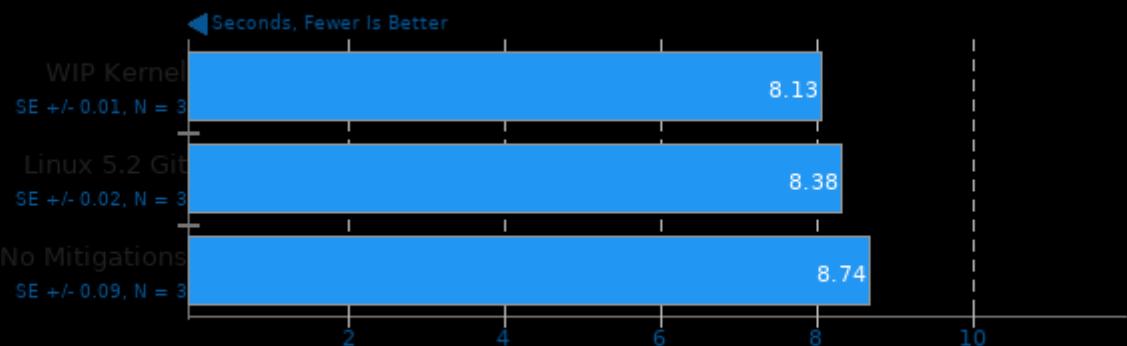
Count: 2 - Type: Thread



1. (CC) gcc options: -lpthread

Hackbench

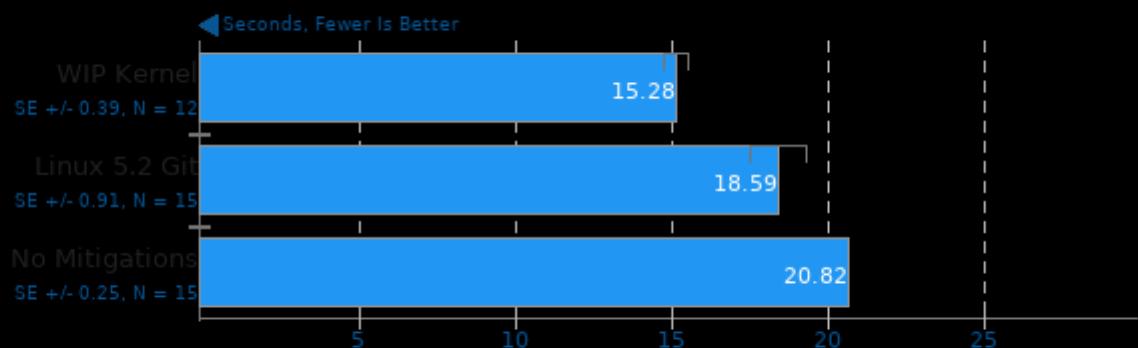
Count: 4 - Type: Thread



1. (CC) gcc options: -lpthread

Hackbench

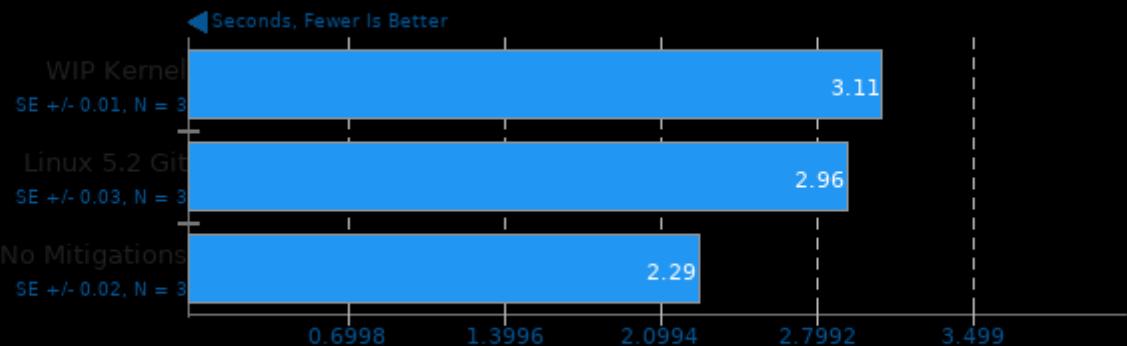
Count: 8 - Type: Thread



1. (CC) gcc options: -lpthread

Hackbench

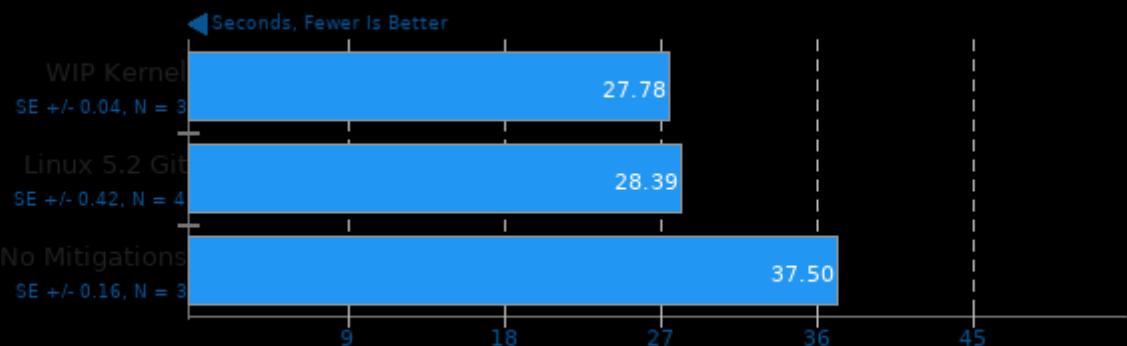
Count: 1 - Type: Process



1. (CC) gcc options: -lpthread

Hackbench

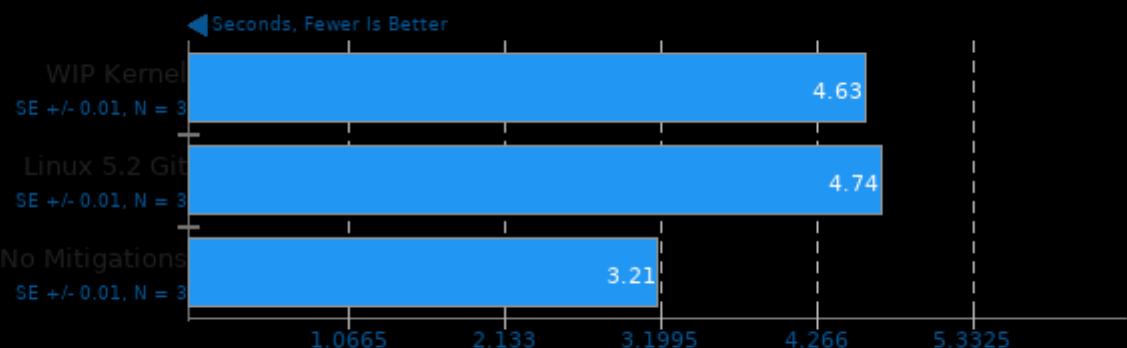
Count: 16 - Type: Thread



1. (CC) gcc options: -lpthread

Hackbench

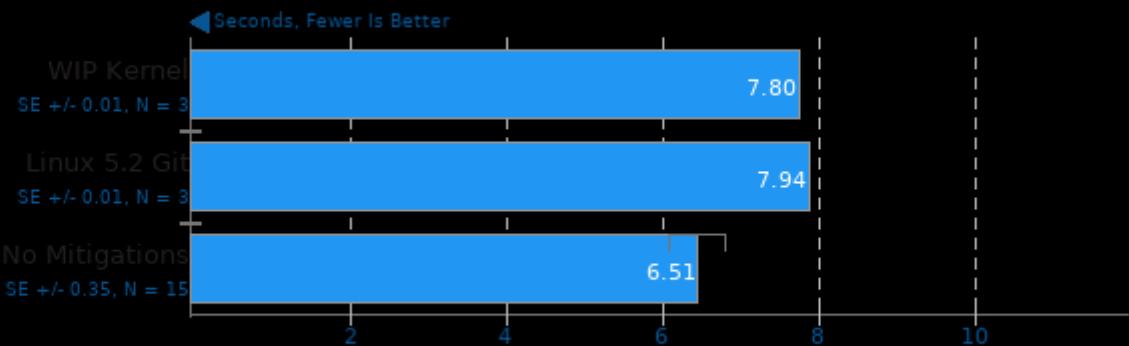
Count: 2 - Type: Process



1. (CC) gcc options: -lpthread

Hackbench

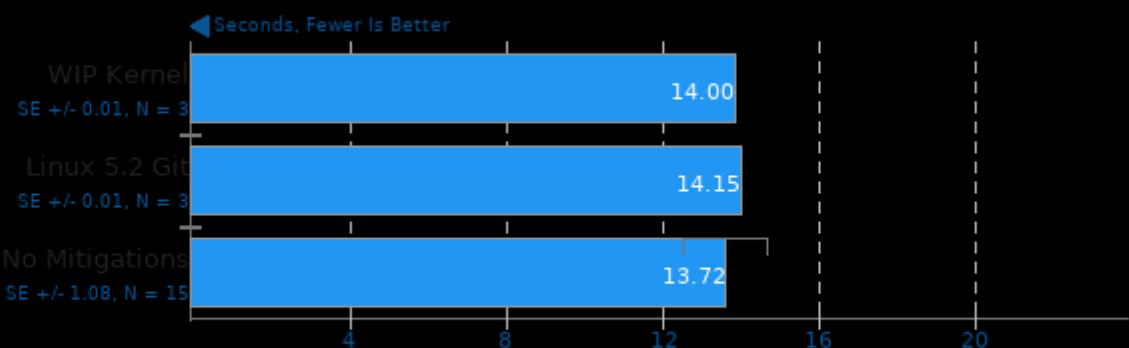
Count: 4 - Type: Process



1. (CC) gcc options: -lpthread

Hackbench

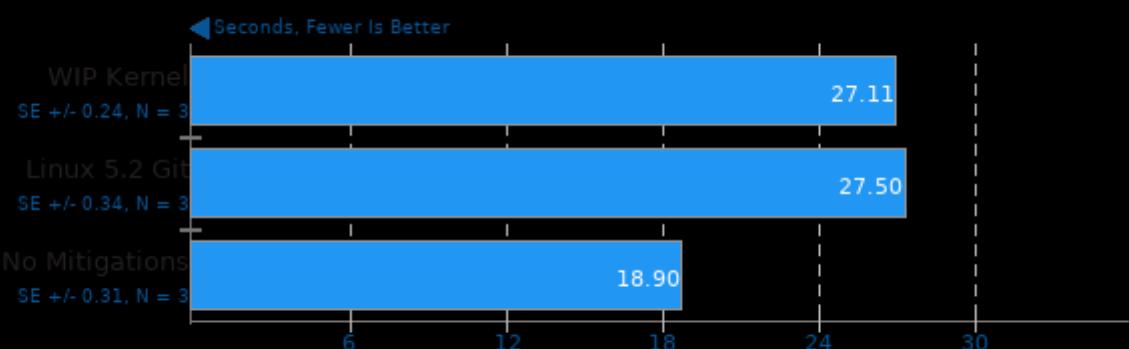
Count: 8 - Type: Process



1. (CC) gcc options: -lpthread

Hackbench

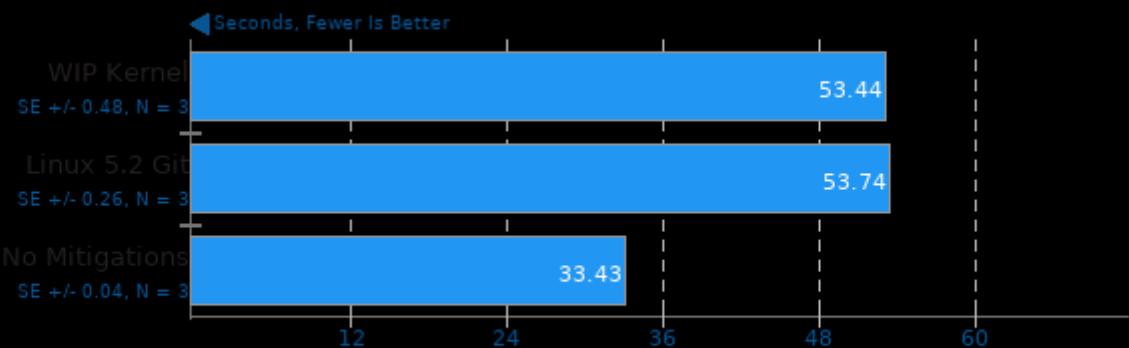
Count: 16 - Type: Process



1. (CC) gcc options: -lpthread

Hackbench

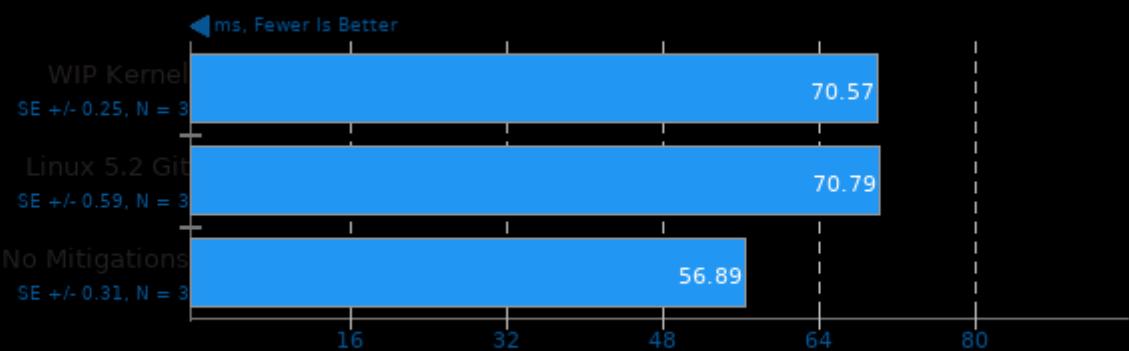
Count: 32 - Type: Process



1. (CC) gcc options: -lpthread

Selenium

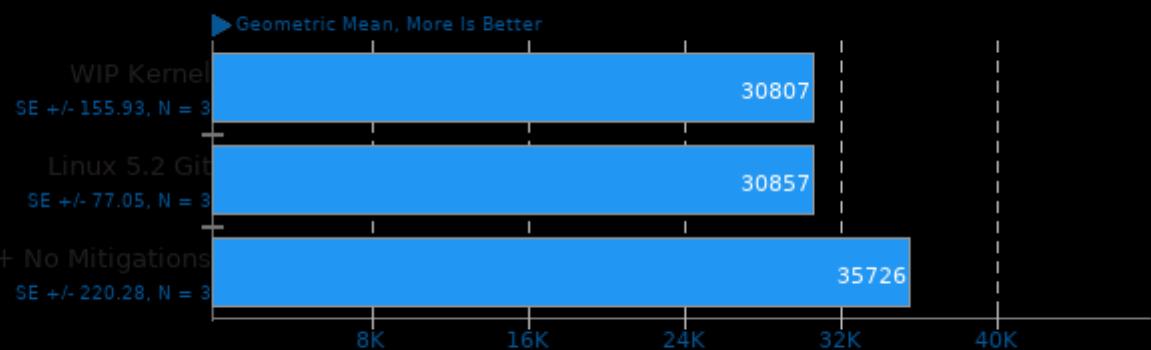
Benchmark: ARES-6 - Browser: Firefox



1. firefox 67.0.3

Selenium

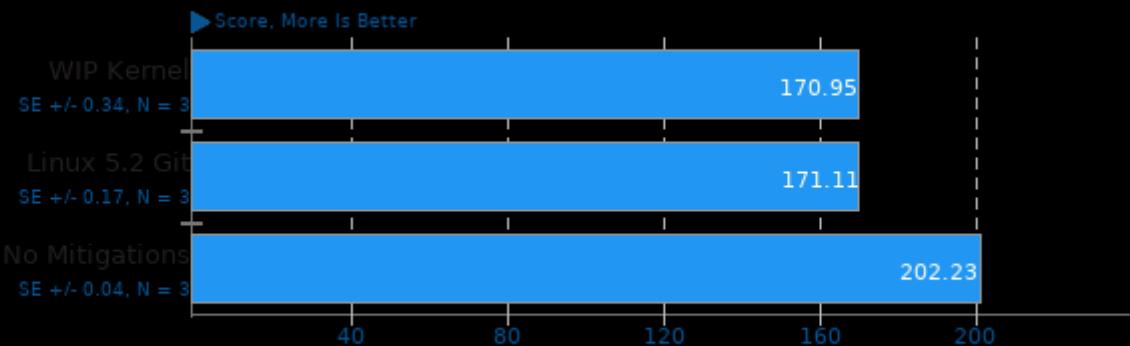
Benchmark: Octane - Browser: Firefox



1. firefox 67.0.3

Selenium

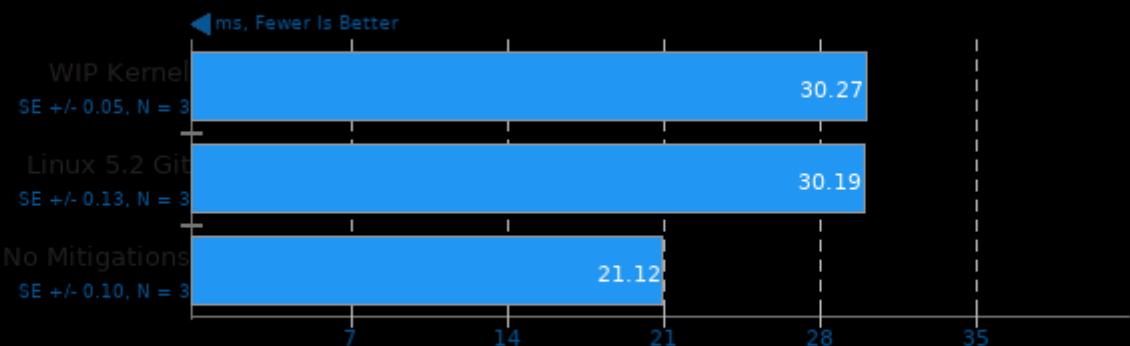
Benchmark: Jetstream - Browser: Firefox



1. firefox 67.0.3

Selenium

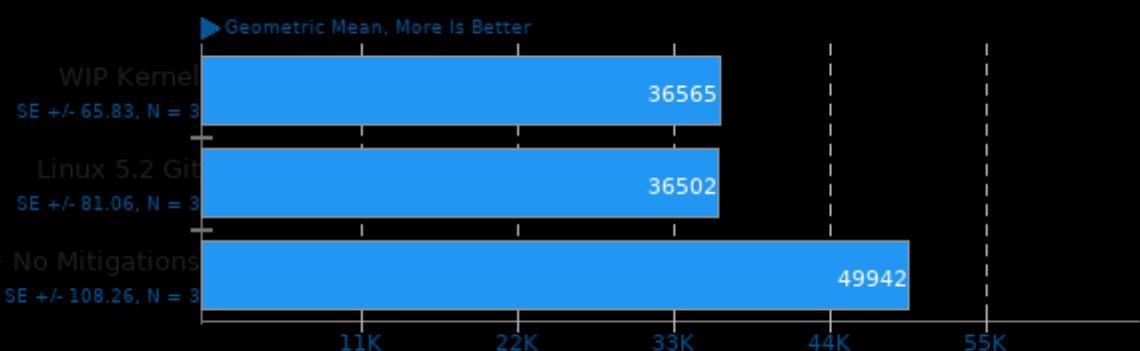
Benchmark: ARES-6 - Browser: Google Chrome



1. chrome 75.0.3770.100

Selenium

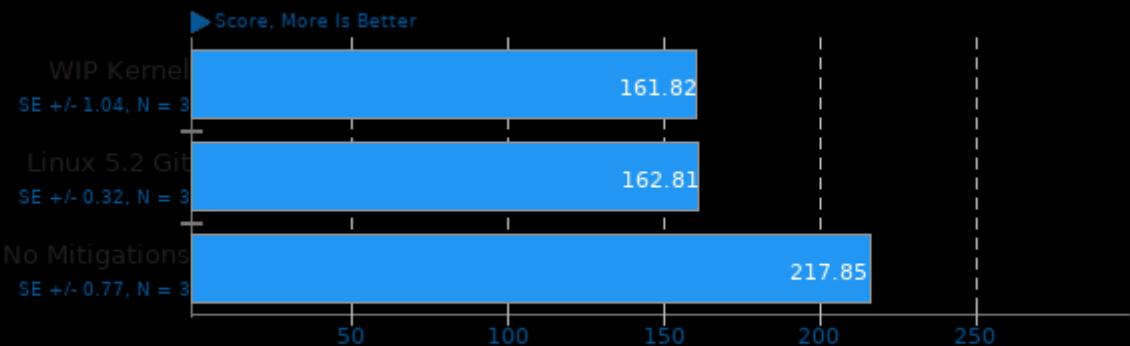
Benchmark: Octane - Browser: Google Chrome



1. chrome 75.0.3770.100

Selenium

Benchmark: Jetstream - Browser: Google Chrome

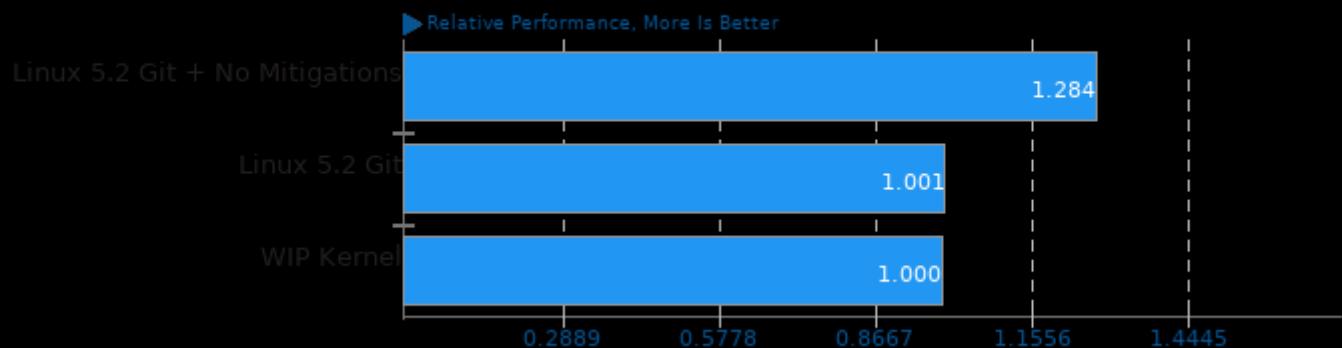


1. chrome 75.0.3770.100

These geometric means are based upon test groupings / test suites for this result file.

Geometric Mean Of Web Browsers Tests

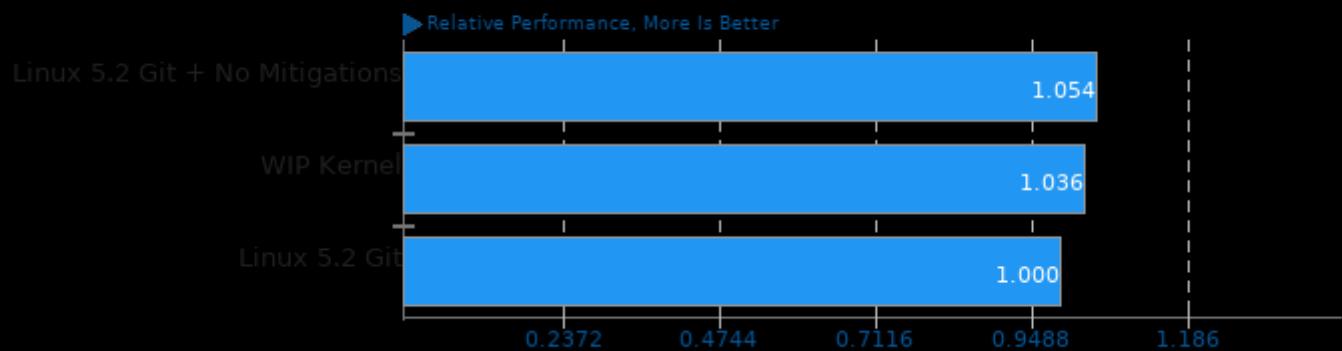
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: system/selenium

Geometric Mean Of C/C++ Compiler Tests

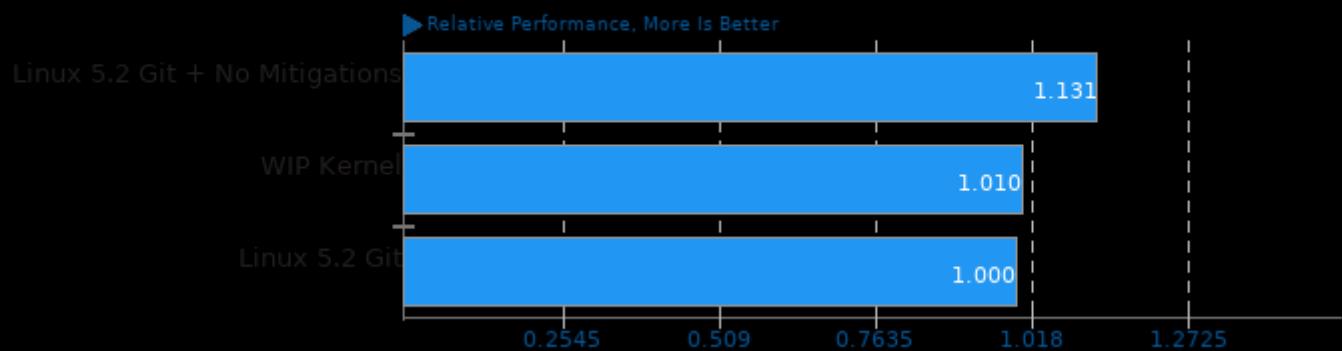
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/vpxenc, pts/pgbench, pts/apache, pts/compress-zstd and pts/svt-av1

Geometric Mean Of CPU Massive Tests

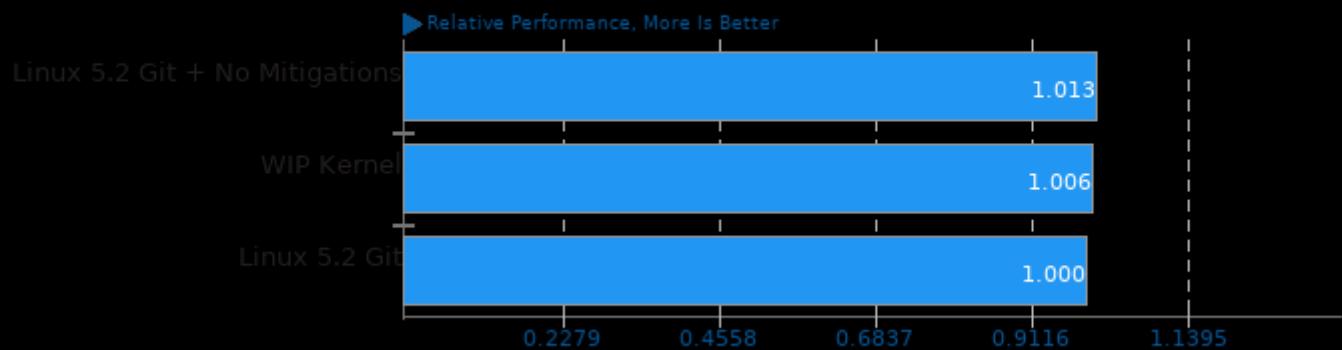
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/apache, pts/apache-siege, pts/build-linux-kernel, pts/compress-zstd, pts/ctx-clock, pts/dacapobench, pts/svt-av1, pts/vpxenc, pts/glibc-bench, pts/go-benchmark, pts/hackbench, pts/pgbench, pts/stress-ng and pts/renaissance

Geometric Mean Of Creator Workloads Tests

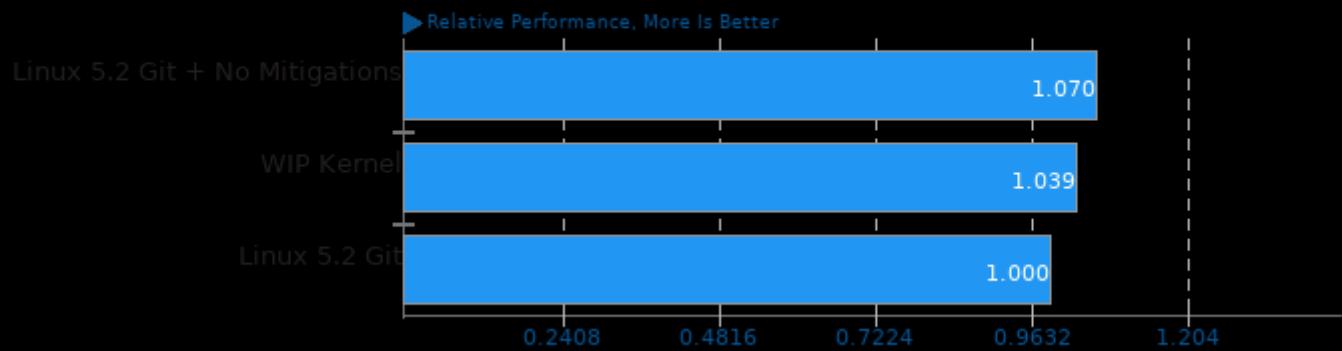
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/vpxenc and pts/svt-av1

Geometric Mean Of Database Test Suite

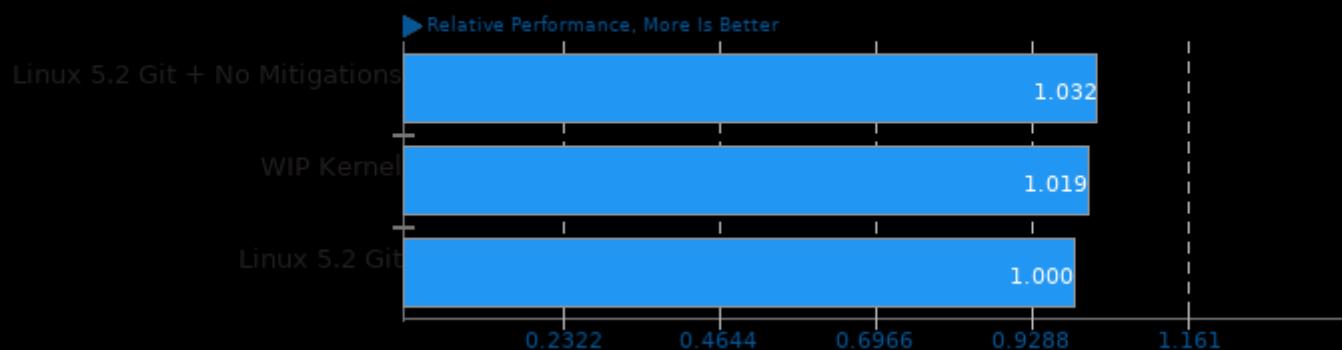
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/sqlite and pts/pgbench

Geometric Mean Of Disk Test Suite

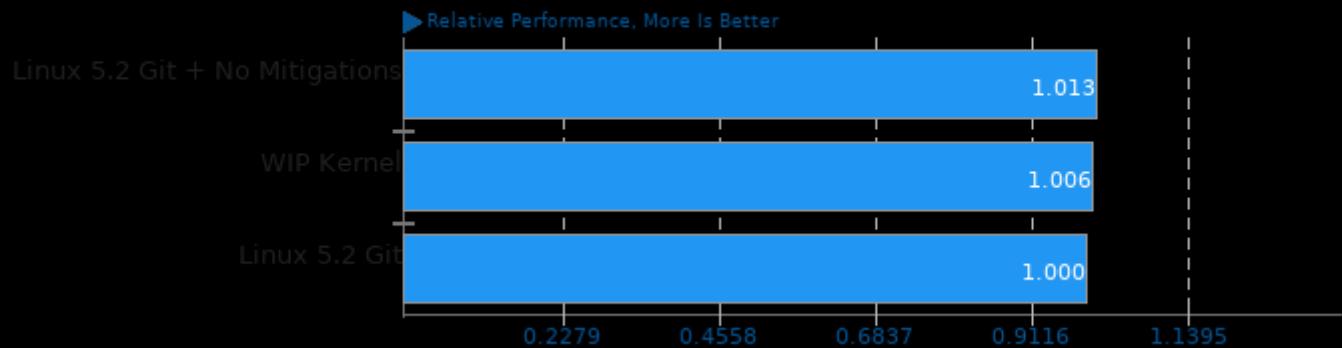
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/sqlite and pts/fio

Geometric Mean Of Encoding Tests

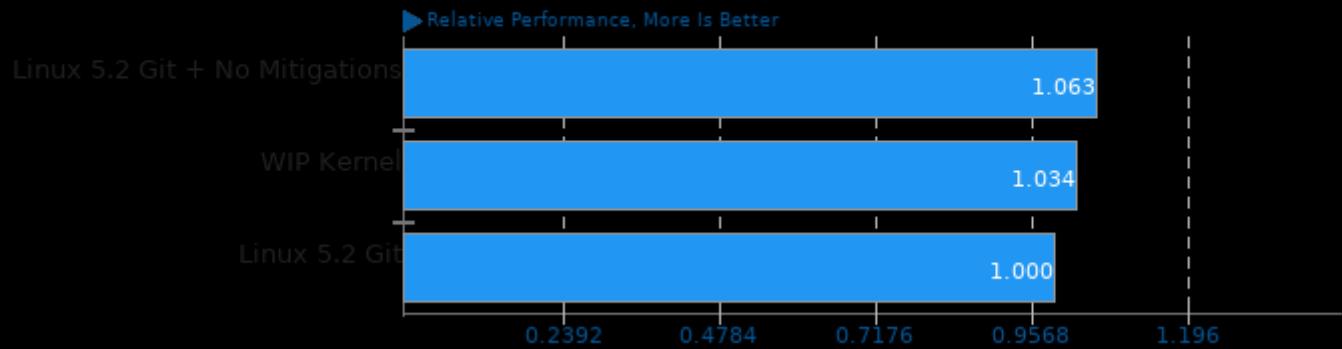
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/vpxenc and pts/svt-av1

Geometric Mean Of Go Language Tests

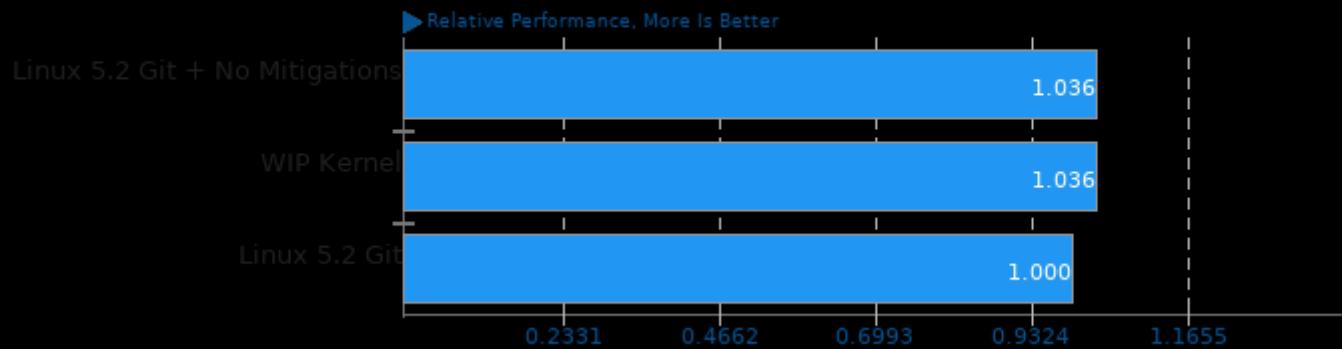
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/ethr and pts/go-benchmark

Geometric Mean Of Java Tests

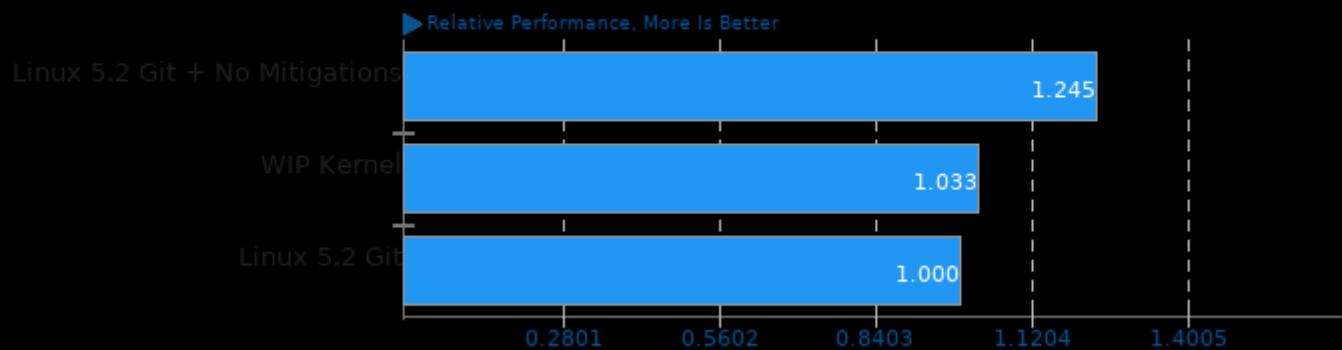
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/bork, pts/dacapobench and pts/renaissance

Geometric Mean Of Common Kernel Benchmarks Tests

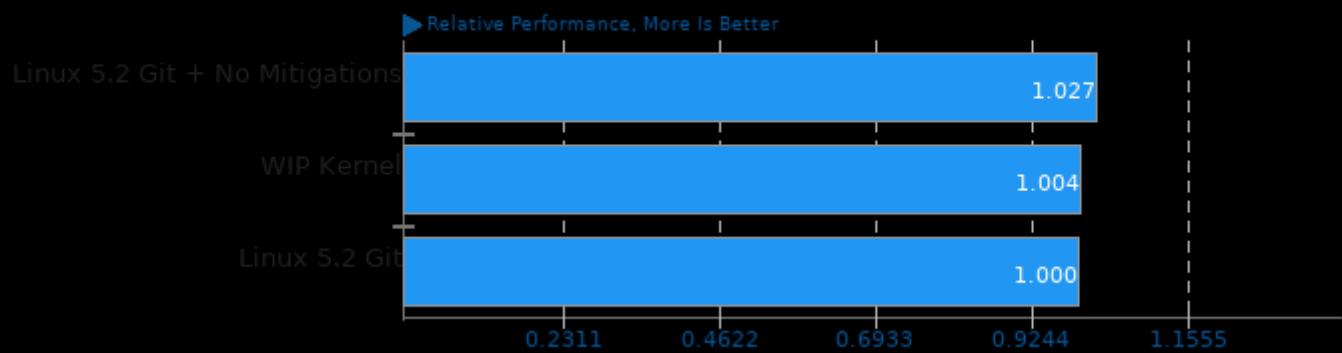
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/apache, pts/pgbench, pts/ctx-clock, pts/hackbench, pts/stress-ng and pts/ethr

Geometric Mean Of Multi-Core Tests

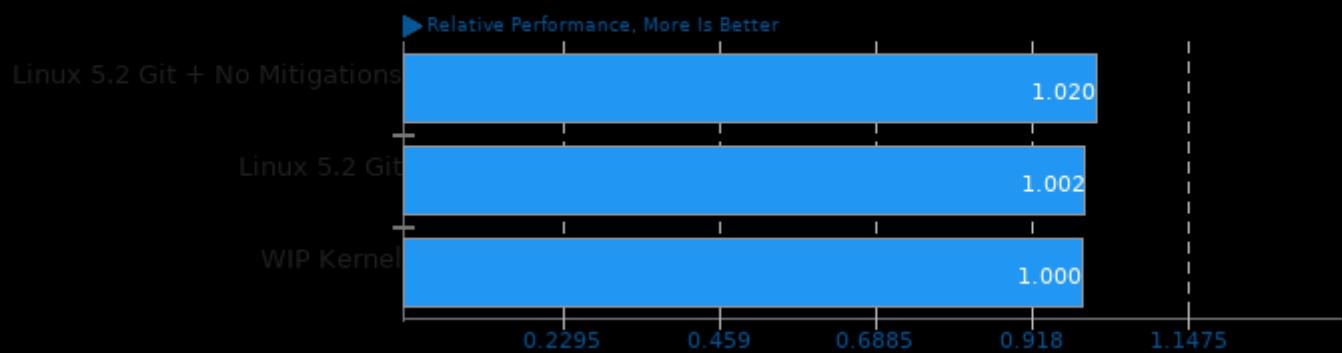
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/vpxenc, pts/svt-av1, pts/compress-zstd, pts/build-linux-kernel and pts/pgbench

Geometric Mean Of Programmer / Developer System Benchmarks Tests

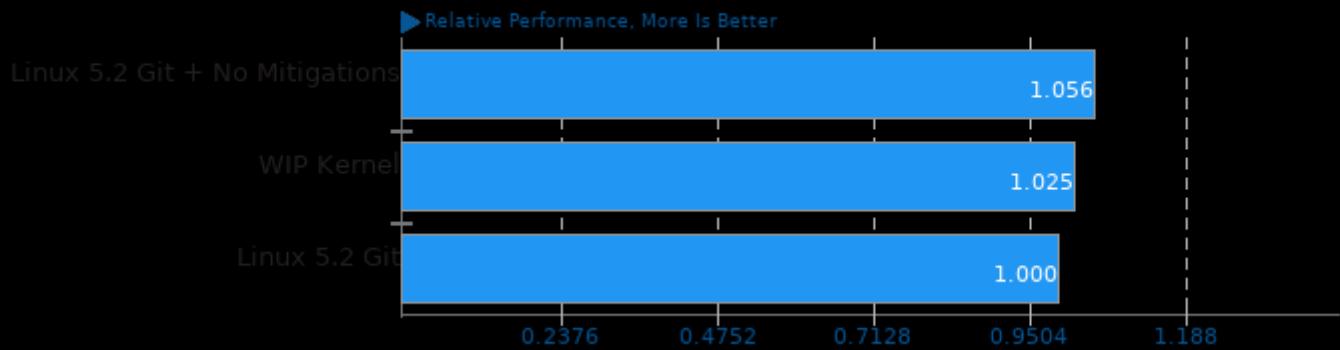
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/compress-zstd and pts/build-linux-kernel

Geometric Mean Of Server Tests

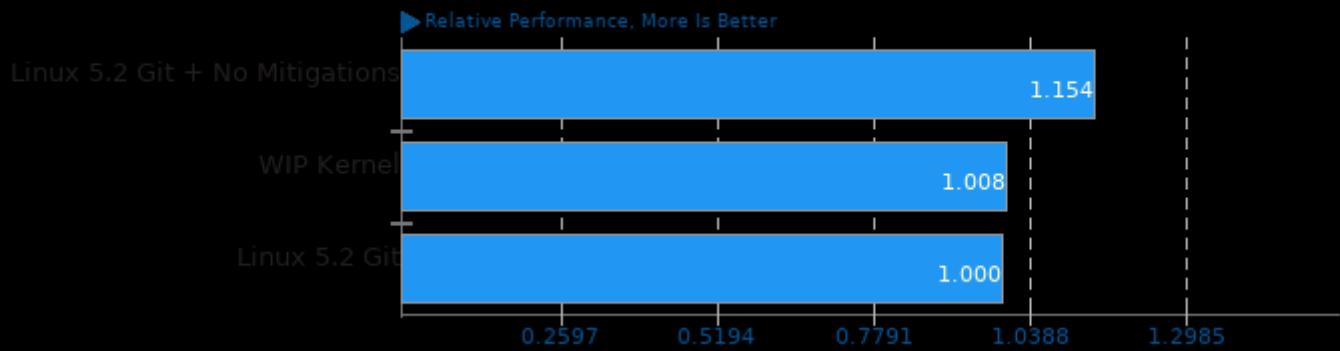
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/apache, pts/apache-siege, pts/pgbench and pts/sqlite

Geometric Mean Of Server CPU Tests

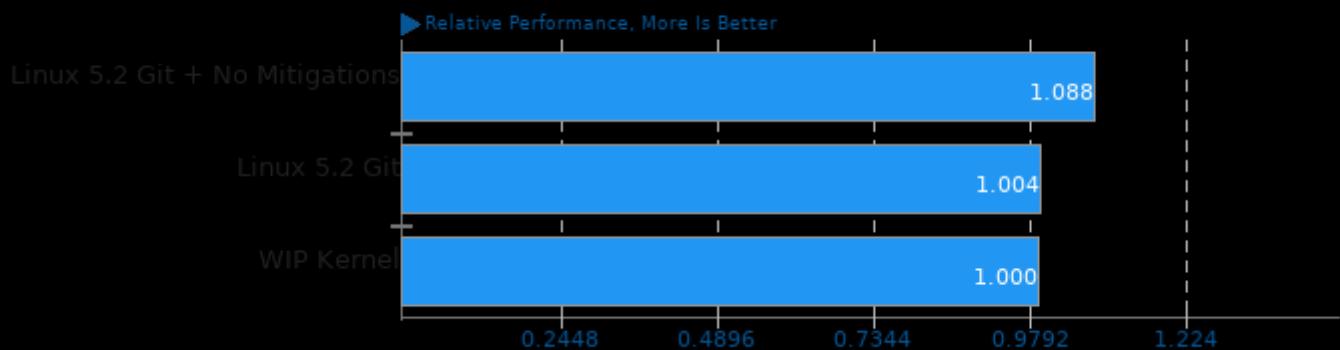
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/cp2k, pts/dacapobench, pts/renaissance, pts/svt-av1, pts/build-linux-kernel, pts/compress-zstd, pts/hackbench, pts/glibc-bench, pts/stress-ng, pts/ctx-clock and pts/apache-siege

Geometric Mean Of Single-Threaded Tests

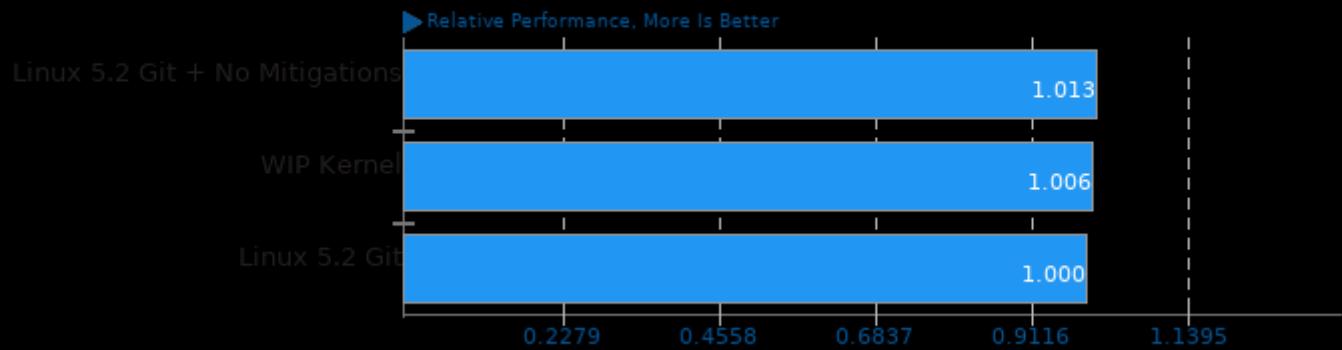
Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/bork and pts/glibc-bench

Geometric Mean Of Video Encoding Tests

Result Composite - WIP Kernel Test Perf



Geometric mean based upon tests: pts/vpxenc and pts/svt-av1

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 05:04.